

NORMANDY TO THE BALTIC

by

FIELD MARSHAL
THE VISCOUNT MONTGOMERY
OF ALAMEIN
K.G., G.C.B., D.S.O.



WITH A SPECIALLY DRAWN MAP IN COLOUR, SHOW-
ING THE MAIN OPERATIONS OF THE CAMPAIGN

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FOREWORD

WE are still too close to the event to attempt a critical analysis of the campaign in North-West Europe from June 1944 to May 1945 and my object is therefore to present a factual account of the part played by 21 Army Group in the conquest of Germany while the details are still fresh in my mind. The subject matter is based on my personal papers, and I have been careful to relate the changing circumstances of the campaign as they appeared to me at the time. I hope the value of this story will lie in recording the factors and reasoning which gave rise to the more important operational plans and decisions within 21 Army Group.

A great Allied team went into battle in North-West Europe in June 1944 under the supreme command of General Eisenhower. The efficiency of the team to which we all belonged can best be judged by the results it achieved. When Allies work together there are bound to be different points of view, and when these occur it is essential that they are thrashed out fully and frankly; but once a final decision is given, it is the duty of all members of the team to carry out that decision loyally. The Allied team worked in this spirit, and by its team work achieved overwhelming victory.

In June 1945, when the German war was over and Supreme Headquarters was being dissolved, I wrote to General Eisenhower and thanked him for all that he had done for the British armies: and for myself; I said that I wanted him to know that I, a British General, had been proud to serve under American command. Ike, as I like to call him, wrote me this very charming letter:

General Eisenhower's letter of 8 June, 1945

"Dear Monty,

Your note to me, written on the 7th, is one of the finest things I have ever received. I am intensely gratified that you feel as you do. In the aftermath of this Allied effort enduring friendships and feelings of mutual respect among higher commanders will have a most beneficial effect. The team must continue to exist in spirit.

Your own high place among leaders of your country is firmly fixed, and it has never been easy for me to disagree with what I knew to be your real convictions. But, it will always be a great privilege to bear evidence to the fact that whenever decision was made, regardless of your personal opinion, your loyalty and efficiency in execution were to be counted upon with certainty.

I hope that you realise how deeply appreciative I am of your letter and the spirit that prompted you to write it, as well as of the tremendous help and assistance

that you have been to me and to this whole Allied Force since it was first formed. In whatever years are left to both of us, possibly we may occasionally meet, not only to reminisce, but to exemplify the spirit of comradeship that I trust will exist between our two countries for all time.

With warm personal regards,

As ever,

IKE."

There were a number of occasions during the campaign when American troops served under my command. I first saw Americans in battle in Sicily and formed a very high opinion of their fighting qualities; in the campaign in North-West Europe I saw them constantly and got to know them well. The American is a brave fighting man, steady under fire, and he has that tenacity in battle which stamps the first class soldier. I have formed a very great affection and admiration for the fighting men of the United States and I am proud to number many friends amongst the General Officers of the American Army.

I take this opportunity to pay tribute to the various Allied contingents which served under my command. Belgians, Czechs, Dutch, French, Poles and other nationals were included in 21 Army Group; they all played their part with distinction and earned our admiration. We shall not forget, moreover, the truly tremendous welcome and hospitality that we received in the liberated countries on our long march into Germany.

Germany
April 1946

C-in-C
British Army of the Rhine

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NORMANDY
TO THE BALTIC

INTRODUCTION

I

THIS is an account of the part played by 21 Army Group in the Campaign in North-West Europe from June 1944 to May 1945.

Modern operations of war are essentially the concern not of one Service but of all three working in close co-operation, and it is neither possible nor desirable to isolate the purely military aspect of the story; on the other hand it is not within the scope of this book to make more than brief reference to the work and achievements of the Allied Navies and Air Forces in the Campaign.

The Navies ensured that our requirements reached us safely from across the seven seas, and fought in close companionship with us: not only in the assault, but in all our battles along the seaboard of North-West Europe. The participation of the Air Forces in the land battles was invaluable and often decisive; never before have land forces operated with the co-operation of such tremendous deployment of air power.

There has been a closer comradeship between the three Services in this war than was ever achieved before, and with it the soldiers have gained a deep respect and admiration for the heroism and fighting skill of the sailors and airmen.

The narrative contains only brief references to our great Russian ally, but it will never be forgotten that the Russians throughout bore the greatest weight of the enemy onslaught on land. There was a close interdependence between the Allied fronts, and the mighty development of Marshal Stalin's strategy in the east was the complement to the Anglo-American offensives in the south and west.

In conclusion, I wish to pay tribute to the splendid fighting spirit, heroism and endurance of the ordinary soldier of the British Commonwealth of Nations. Once again he has indeed proved himself second to none. And if I were asked what is the greatest single factor which contributed to his success, I would say morale. I call morale the greatest single factor in war. A high morale is based on discipline, self-respect and confidence of the soldier in his commanders, in his weapons, and in himself. Without high morale, no success can be achieved—however good may be the

strategic or tactical plan, or anything else. High morale is a pearl of very great price. And a sure way to obtain it is by success in battle.

II

It is certain that this campaign received a degree of publicity in the world press and radio unparalleled in the history of war. Modern means of communication made it possible for the observers at the front to report events on the battlefield by wireless and in the newspapers of the world, within a few hours of their occurrence. The experiences and impressions described by these War Correspondents have profound effects, not only on the morale of the home country, but also upon the actual fighting soldiers, who listen to broadcasts and who rapidly receive copies of their home newspapers. The relationships of the Commander and his staff with War Correspondents have therefore become a matter of first importance; the Commander must study the requirements of the Correspondents accredited to him and must be well informed on the whole subject of war reporting.

The main problem from the military Commander's point of view which arises from the requirements of the Press in war is the conflict between the necessity for security on the one hand, and on the other hand the desire to ensure that the War Correspondents are kept as fully as possible in the military picture. It is vital that as soon as security conditions allow, the Press and Wireless should be permitted to report events—both failures as well as successes—in the fullest possible way. But the dictates of security must sometimes leave War Correspondents with an acute sense of frustration and dissatisfaction. It has therefore been my policy to take them as much as possible into my confidence at all times, and I am happy to record that the loyalty and integrity of the Correspondents accredited to 21 Army Group were always of the very highest order.

In the public interest the Press obviously has the right to criticize events at the front, but the problem is to ensure that its criticism is based on sound premise, because there are bound to be occasions during a campaign when 'events are not what they seem'. It is no reflection on a Commander's confidence in his Correspondents to say that there are some military secrets which he cannot divulge to them, and this particularly applies to his long term projects for operations; it frequently happens that a long term plan is not even divulged to all the members of the Commander's executive staff, since there is no justification for burdening more individuals than necessary with vital secrets. This point is well exemplified when a Commander is fighting a

battle for position, in which he is attempting to pursue a policy of attrition, or wearing down the enemy strength, and forcing the enemy into a position favourable for launching a decisive blow. Such a stage may take some time, and while it is proceeding the visible day-to-day results from an observer's point of view may appear disappointing; unless the observer knows exactly the object behind the operations, and can be told the degree to which the stage is being set, he may well misinterpret the situation, and express disappointment at the apparent lack of results. If he does, he can undermine the confidence of the soldiers in their leader and affect adversely their morale.

The fact is that the Press requires daily reports for its public, whereas a Commander is largely concerned with events which may be weeks or even months ahead. How then can we prevent misunderstandings in the minds of the War Correspondents? This is a problem which demands our closest study.

21 Army Group was served by a very fine body of representatives of the Press and Radio, and I always regarded them as an integral part of my staff. The relations between them and the headquarters and formations of the Army Group were excellent, and they became indeed a part of the big family. It is a great tribute to them all, and the Public Relations Service, that such a great degree of co-operation and friendship was achieved, and that the tremendous influence which they have was exerted in accordance with the highest principles of truth and loyalty.

CHAPTER ONE

The Second Front

THE great design for the return of Allied Forces to North-West Europe had its beginnings at Dunkirk. From that time, in spite of the many setbacks which we endured during the early war years, the resolution remained that one day our forces would go back to France and the Low Countries to avenge the defeats of 1940.

In December 1941 President Roosevelt and Mr. Churchill agreed upon the complete unification of the war effort of the countries they represented, and thereafter the United States and British forces were deployed under the direction of the Combined Chiefs of Staff. Soon after, the conception of a mighty cross-Channel assault against the Fortress of Europe began to receive consideration, for in April 1942 it was jointly decided that such an enterprise would constitute the principal Anglo-American effort for the defeat of the German forces.

In the spring of 1942 the Red Army was slowly falling back before the German onslaught, and joint conferences were held in London with the object of determining means of relieving pressure on the Soviets. In July Admiral King and General Marshall visited the British Chiefs of Staff in an urgent endeavour to find some way of distracting German forces from the Eastern Front. It was a dark hour; our resources were so meagre and our commitments so widespread, that a solution was difficult to determine. The possibility of attacking Western Europe was examined, but the strength of the enemy, and our own lack of equipment and of all the special adjuncts required for such an operation, made its successful accomplishment out of the question at this time.

It was eventually decided that the only operation that could be undertaken with a fair prospect of success was an assault landing in North Africa. This was far from Germany, but was calculated to divert at least some German energies from Russia, and would also materially improve the critical situation in the Middle East.

When the North African project was approved, it was accepted that the cost in joint resources would mean not only that any hope of an operation in Western Europe in 1942 would have to be abandoned, but also that it would be impossible to complete the assembly of forces in England for a major cross-Channel assault in 1943.

It has since been learned that the German plan at that time was to attempt the defeat of Britain by aerial bombardment and by destruction of her forces in the Middle East. Hitler's main project was to break through Stalingrad and Egypt and join the two salients in the Middle East. The heroic defence of Stalingrad and the crushing defeat Rommel sustained at El Alamein dislocated the German pincer movement. The development of operations in North Africa together with the advance of the Eighth Army, and the Soviet offensive from the Volga, proved to be the turning points in the war: the Axis was forced on to the strategic defensive.

When Mr. Churchill and President Roosevelt met at Casablanca in January 1943 it was apparent that the African campaign was destined to achieve decisive success, and the development of operations after the Tunisian campaign was discussed.

Again the most desirable course of action would have been to close with the enemy in Western Europe. But again the Allied war potential had not yet been developed sufficiently to produce and sustain the resources required for such a gigantic undertaking, and once again the opening of the so-called 'Second Front' had to be postponed. Axis control of the Mediterranean islands and southern coast of Europe still forced our shipping into the 12,000 mile detour round the Cape; time was required to develop the vast mobilization in the United States, to ferry men and material across the Atlantic to England, to complete the defeat of the submarine, to develop the strategic air offensive over Germany, and to manufacture and assemble the truly enormous mass of material which the invasion of Western Europe demanded.

It was therefore decided that the next step would be to knock Italy out of the war, lock up the Italian fleet and open the Mediterranean. This would result in a great saving in shipping, would cause diversion of German forces, and would give us a footing in 'Fortress Europe' together with airfields of great strategic importance.

At the same time, it was resolved at Casablanca to resume the concentration of forces and material in the United Kingdom, and to commence detailed planning for the cross-Channel project. A joint Anglo-American staff was instituted, under the leadership of a Chief of Staff to the Supreme Commander (designate); and taking the initial letters of his appointment, the organization was christened 'Cossac'. Cossac was directed by the Combined Chiefs of Staff to make preparations for the return of Allied Forces to Western Europe, in the event of a sudden weakening of Germany to the extent that landings could be made in the face of light or negligible resistance, and at the same time to make plans for a major seaborne assault as early as possible in 1944.

In preparation for the operation, the Allied Commanders decided to undertake the great strategic bombardment of Germany, which aimed at inducing a creeping paralysis throughout the country by smashing its industrial and economic capacity; by the middle of 1943 the air assault by Bomber Command and Eighth United States Air Force was in full swing and producing important results.

At the Washington Conference in May 1943 the conception of a full scale invasion of the Fortress of Europe was confirmed, and the code name 'Overlord' was formerly accepted for the operation. The spring of 1944 was then designated as the target date.

By August 1943 Cossac had produced a tentative plan which was considered at the Quebec Conference, and, although at that time Mr. Churchill suggested an increase in the forces it was proposed to employ in the assault, approval was given for implementing the project as far as it was possible before the appointment of a Supreme Commander.

This brief summary of the history of Overlord brings us to the close of 1943. During the long period of consideration given to the invasion of Western Europe, a number of long term projects were initiated which played an important part in the success which the operation achieved. The design and production of artificial harbours, the preparation of cross-Channel pipe lines for fuel supply, the evolution of the technique for assaulting defended beaches and the collection and collation of an immense volume of geographical and geological data concerning the 'invasion coast' and its hinterland, were some of the tasks undertaken many months and even years before D-day, the first day of operation Overlord.

It has been shown why the opening of the 'Second Front' did not take place earlier than 1944. By the late spring of 1944, however, the progress of the German forces had been halted in all theatres; in the Battle of the Atlantic the submarine was defeated; the Battle of the Air was paralysing Germany; and as a result of our operations in the Mediterranean, the short sea route had been reopened and the enemy had been forced to make considerable dispersion of his forces in southern Europe.

The stage was properly set for launching the greatest amphibious operation in military history.

CHAPTER TWO

The Appointment of the Higher Command for Operation Overlord and the Evolution of the Revised Outline Plan

At the end of 1943 President Roosevelt and Mr. Churchill met in Cairo and subsequently went to Teheran to confer with Marshal Stalin. Following these meetings the announcement was made of the appointment of General Eisenhower as Supreme Allied Commander for Overlord, and in due course I was appointed Commander-in-Chief of 21 Army Group: which comprised the British and Canadian forces in the United Kingdom destined to take part in the operation.

On 1 January 1944 I handed over command of the Eighth Army and started my journey to England from the Sangro River airstrip in Italy. It was arranged that I should stop at Marrakesch to visit Mr. Churchill who was recuperating there from his recent attack of pneumonia. With him I found General Eisenhower. I was shown for the first time a copy of the Cossac plan for the invasion of France, and the Prime Minister asked for my comments. In the short time available I did no more than express the opinion that the initial assaulting forces were too weak for the task of breaking through the German coastal defences, and that the proposed frontage of assault was too narrow, having in mind the necessity to plan for rapid expansion of the bridgehead and for the speedy reception of the follow-up forces and subsequent build-up.

It was decided that on my arrival in England I should examine the Cossac plan in detail, together with the Naval and Air Commanders-in-Chief, with a view to recommending any changes or modifications considered necessary to ensure the success of the operation. The Supreme Commander was on his way to the United States, but his Chief of Staff, General Bedell Smith, came to London bearing a letter which instructed me to act on General Eisenhower's behalf during his absence.

The Commander-in-Chief of the Allied Naval Expeditionary Force was Admiral Sir Bertram Ramsay and of the Allied Expeditionary Air Force, Air Chief Marshal Sir Trafford Leigh-Mallory. There was no parallel appointment of Commander-in-Chief of the Allied land forces, but General Eisenhower decided that I should act in that capacity for the assault, and subsequently until the stage was reached in the development of our operations when

a complete American Army Group could be deployed on the Continent. The assault was an operation requiring a single co-ordinated plan of action under one commander; I therefore became the overall land force commander responsible to the Supreme Commander for planning and executing the military aspect of the assault and subsequent capture of the lodgement area.

I arrived in England on 2 January 1944, and immediately started a detailed study of the Cossac plan. I formulated my views on the measures required to convert the project into a practical proposition with reasonable chances of success, and discussed them at length with Admiral Ramsay and Air Chief Marshal Leigh-Mallory. By 21 January, when the Supreme Commander held the first conference following his return from the United States, we were in agreement on a Revised Outline Plan, which General Eisenhower accepted.

The object of Operation Overlord was "to mount and carry out an operation, with forces and equipment established in the United Kingdom and with target date 1 May 1944, to secure a lodgement on the Continent from which further offensive operations could be developed. The lodgement area must contain sufficient port facilities to maintain a force of some twenty-six to thirty divisions and enable that force to be augmented by follow-up shipments from the United States or elsewhere of additional divisions and supporting units at the rate of three to five divisions per month".

The first problem was to decide where to deliver the assault. The Allied forces had got to smash into the German 'Atlantic Wall' defences, gain a firm foothold and then secure port facilities, in order to build up sufficient strength and resources to carry the war into Germany.

The Cossac plan selected the area between Grandcamp and Caen, in the Baie de la Seine, for the assault. This area was known by the code name 'Neptune', to differentiate it from other possible sectors in which Overlord might have been launched. The choice was made after exhaustive inter-service study of the 'invasion coast', which, by the factor of aircraft range for fighter cover from home bases, was limited to the sector between Flushing and Cherbourg. Consideration of the beach areas suitable for combined operations revealed that those offering the best conditions for passing vehicles and stores inland were, firstly, in the Pas de Calais area (between Gravelines and the River Somme) and secondly, in the Baie de la Seine (between the River Orne and the base of the Cotentin Peninsula).

The Pas de Calais area involved a shorter distance from home bases, and thus would have enabled us to develop optimum air

support and would have given a quicker turn round for shipping; but the strongest enemy defences along the whole coast existed in this sector, which was also a focal area for hostile fighter aircraft disposed for defence. The Caen area was relatively lightly defended and afforded the great advantage of a coastline sheltered from prevailing winds.

The hinterland of the Baie de la Seine provided good terrain for airfield construction (especially south-east of Caen) and offered the choice of developing operations to secure the Seine ports or the Cherbourg-Brittany group. From the Pas de Calais the rapid seizure of adequate port facilities would have been more difficult, as the alternatives were the Channel ports proper, including Antwerp—which could be reached only after crossing a series of major river and canal obstacles—or the Seine ports, which lay some 150 miles to the south-west of the most suitable beach areas.

Obviously the development of the full Allied potential depended on securing ports; the overriding consideration in the plan of operations once a bridgehead had been established, was the speed with which ports could be captured and opened for our shipping. Accordingly the Cossac plan recommended initially the seizure of Cherbourg and subsequently of the ports in the Brittany peninsula, including Nantes. The lodgement area therefore was to cover the Cotentin and Brittany peninsulas, and, in order to develop airfields, the area south-east of Caen. With these factors in mind, and in view of the need for space to assemble the forces required for the invasion of Germany, it was considered that the eastern flank of the lodgement area should be carried to the line of the River Eure and lower Seine, while the southern boundary was to follow the line of the Loire.

Until ports had been captured, reliance was to be placed on creating artificially sheltered berths by sinking specially built caissons and cargo ships in the Baie de la Seine, the projects for which went by the name of Mulberry (artificial harbours) and Gooseberry (breakwaters). The Cossac plan dismissed the possibility of the early capture of Cherbourg by assaulting the Cotentin peninsula, on the grounds that it would be easy for the enemy to block the base of the peninsula, and thus prevent further expansion of the bridgehead; the alternative of including beaches on the eastern side of the peninsula, as part of the frontage of assault, was also dismissed, as it was feared that the Carentan estuary and marshy country surrounding it would split our forces and render them liable to defeat in detail.

The operational plan of assault and subsequent development of operations was based on conjectural dispositions of enemy mobile reserve formations, on the basis of the maximum number regarded as acceptable if the project were to have a reasonable

chance of success. Counting the coastal crust, it was assumed that we should encounter five enemy divisions on D-day, and that another seven would arrive in the beach-head area by D+5. Of these twelve, five would be Panzer divisions.

The invasion forces were assumed to be provided with sufficient landing ships and craft to lift three assault divisions and two follow-up divisions, while two further divisions would be afloat on D-day in ships. The anticipated air lift for airborne forces was two-thirds of one division.

The plan therefore provided for an assault on a frontage of one corps of three divisions, and, assuming optimum weather conditions, the build-up by D+5 was planned to ensure some nine divisions with a proportion of armour being available, exclusive of airborne troops. However, a study of weather conditions in the Channel in May over a number of years indicated that up to one day in four might be unsuitable for beach working. The effect of this might reduce our forces available on D+5 to only seven divisions. Subsequent build-up was to be at the rate of one division per day (again assuming favourable weather) and the bridgehead was to be developed to the general line Trouville-Alençon-Mont St Michel by D+14, by which time it was hoped to have completed the reduction of Cherbourg. Later staff studies indicated that this timing was probably very optimistic. Meanwhile the Cossac plan made certain reservations; the total number of enemy first line divisions immediately available in western Europe to reinforce Normandy was not to exceed twelve, and not more than an additional fifteen divisions should be moved into France from other theatres during the first two months after D-day.

The Cossac plan emphasized the vital necessity of reducing the effectiveness of the German Air Forces before undertaking the operation and also the reliance which had to be placed on the untried expedient of establishing artificially sheltered waters: since it would be necessary to rely on building up and maintaining our forces over the beaches for an appreciable period.

This was the plan which I first saw at Marrakesch.

My immediate reaction was that to deliver a seaborne assault by one corps of only three divisions against the German Atlantic Wall as then constituted could hardly be considered a sound operation of war.

While accepting the suitability of the Baie de la Seine for the assault, I considered that the operation required to be mounted in greater strength and on a wider front. It was vital to secure an adequate bridgehead at the outset, so that operations could be developed from a firm and sufficiently spacious base; in any event the area we could hope to seize and hold in the first days of the

invasion would become very congested. Experience in amphibious operations had shown me that if build-up arrangements and expansion from the landing beaches are to proceed smoothly, each corps and army to be employed in forming and developing the initial bridgehead must be allotted its own sector in the assault; it is unsound to aim at passing follow-up and build-up divisions of one corps through beachheads established by another, because confusion inevitably results together with delay in deployment at the vital time. Moreover the relatively narrow front of assault proposed in the Cossac plan appeared to me to give the enemy the opportunity of 'roping off' our forces quickly in a shallow covering position, in which the beaches would be under continuous artillery fire. An increased frontage would make it more difficult for the enemy to discover the extent of our operation and delay him in deciding the direction of our main axes of advance inland; at the same time we should have greater opportunity for finding and exploiting soft spots, and greater chances of locating adequate exit routes from the beaches for our transport. The latter problem was complicated by the coastal inundations which canalized the beach exits through a number of small villages.

Recognizing the vital importance of securing Cherbourg quickly, I felt that we should get a foothold in the Cotentin peninsula in the initial operation. The river lines and flooded marshy areas at the base of the peninsula might well enable the enemy to seal off our western flank even with minor forces, and thus render the capture of Cherbourg a difficult and lengthy operation. I therefore recommended increasing the frontage of assault to the west, to embrace beaches on the eastern side of the Cotentin peninsula, between Varreville and the Carentan estuary. If necessary the link-up across the estuary could be facilitated by the employment of airborne forces.

East of the River Orne, invading forces would come within range of the formidable coast defence batteries located in the Havre area and between Havre and Houlgate, and I therefore recommended that the invasion front should extend from the Varreville area to the River Orne. This frontage amounted to some fifty miles.

In deciding the degree to which the assault could be strengthened, the main factor was availability of craft and shipping, but in order to cover the front and facilitate organizing the operation on a frontage of two armies, I recommended invading on a five-divisional frontage, with two divisions in the immediate follow-up, and using at least two, and if possible three, airborne divisions: to be dropped prior to the actual seaborne assault.

It was desirable to acquire additional sea lift not only for the assault, but also for the subsequent build-up. As I saw the problem,

we had to ensure that there would be adequate forces to withstand immediate counter attacks on D-day, and we also had to 'build-up' sufficiently rapidly to meet the first major co-ordinated counter-attack: which I appreciated might develop on D+4. Once we had established a footing on the Continent in spite of hostile attempts to hurl us back into the sea, the enemy would concentrate to deliver a properly staged thrust at some selected area. The Cossac plan envisaged up to five or six mobile enemy divisions being in action against the beachhead by D+3, and it was essential that our own build-up should ensure that we had comparable forces ashore and ready for action on that day: bearing in mind that the assault divisions would by then be very tired and probably depleted.

The problem was whether the naval and air forces would be able to fall in with these revisions to the Cossac plan, and above all whether the additional craft and shipping could be found to make them possible. Air Chief Marshal Leigh-Mallory agreed to the modifications and from the point of view of the Air Forces there appeared to be no insoluble difficulties. But Admiral Ramsay showed that grave problems confronted the Allied Navies in the revised plan. The additional naval resources, assuming provision of craft, would create serious congestion of shipping on the south coast of England, affording a good target for hostile air action or rocket activity; the standard of training of the extra crews required would not be as high as that of the naval forces already organized for the invasion; the wider area of assault would increase the mine-sweeping commitment, as extra cross-Channel lanes would be required; and an increased naval bombarding commitment would be incurred for neutralizing the enemy coast defence batteries. The basic problem was provision of the necessary assault craft to transport the larger invasion force; this would have to be obtained from the Pacific, from the Mediterranean, from current production in Britain and the United States, or from a combination of these sources. If the target date could be extended to 31 May (instead of 1 May) craft production of an additional month would be available and the extra time would give the opportunity for improving the training of additional assault craft crews. Admiral Ramsay therefore favoured a revised target date.

On examination it was found that, even with an additional month's production, there would still be insufficient craft for the undertaking and it was thereupon suggested that additional resources should be made available for Overlord from the Mediterranean. To go back some time, an operation called 'Anvil' had been under consideration in the Mediterranean since the Casablanca Conference, having as its object the mounting of an assault on southern France, which was to link closely with the

timing of the invasion of north-west Europe. The Anvil assault was planned on a frontage of three—or at worst two—divisions and a corresponding proportion of available landing ships and craft had been allocated to the Central Mediterranean theatre.

The Supreme Commander regarded Anvil as an important contribution to Overlord, for it was to contain enemy forces in southern France; but he advised the Combined Chiefs of Staff that he regarded Overlord as first priority, and that if insufficient naval resources were available for both operations he considered Anvil should be postponed or reduced to a one-division assault: to be delivered when enemy weakness justified its implementation.

The major factors affecting the provision of craft for Overlord were thus the question of extending the target date and the postponement or reduction in scope of Operation Anvil.

Apart from naval considerations, the advance of the target date to 31 May afforded a longer period for the strategic bombing offensive on Germany: for the effective completion of the programme for reducing the enemy's railway potential, and for destroying the major bridges on his communications in western Europe. Moreover it appeared likely that weather conditions at the end of May would be more likely to favour the mounting of a large-scale Russian offensive which would assist Overlord; and in the Mediterranean the situation might be sufficiently resolved to exclude the necessity for Anvil, in that our forces in Italy might have drawn the available German reserve divisions in southern Europe into that country. The Supreme Commander was averse to any postponement if it could be avoided but, when there appeared to be no alternative, he recommended to the Combined Chiefs of Staff that Overlord should be mounted with a target date not later than 31 May. The Combined Chiefs of Staff agreed to this on 1 February, and at the time General Eisenhower made the reservation to them that the exact date of assault be left open pending detailed study of moonlight and tidal conditions prevailing during the first week of June.

The decision to provide extra craft for Overlord at the expense of Anvil was not taken immediately, but eventually the Combined Chiefs of Staff agreed to General Eisenhower's recommendations and confirmed that the additional craft required would be found from the Mediterranean. Anvil was postponed and indeed did not finally take place until August 1944.

I have already mentioned that the Cossac plan assumed an air lift for only two-thirds of an airborne division; this lift was to be used on D-day for a descent on Caen. It was evident that airborne forces could play an extremely important role in the assault, and it seemed unfortunate that such a small lift should be at our disposal when there would be three or four airborne

divisions available for operations on D-day. Extension of the invasion frontage to the base of the Cotentin peninsula resulted in increased commitments for airborne forces, as they were required on the western flank to ensure the capture of the causeways leading across the inundations behind the assault beaches. The Supreme Commander strongly supported the need for additional air lift and, as a result of his recommendations, the availability of transport aircraft and gliders was materially increased. The extension of the target date helped in this matter, for the extra time made it possible to concentrate more aircraft and to train additional crews.

I will discuss my plan for the development of operations in a later chapter. The task was, as in the Cossac plan, to secure Cherbourg and the Brittany group of ports, and to establish the lodgement area.

At the conference on 21 January, General Eisenhower approved the revisions to the Cossac plan and recommended their adoption to the Combined Chiefs of Staff. As time was already short for completion of all the detailed staff work required for such a great undertaking, he ordered that planning be undertaken at once on the basis of the revised plan.

CHAPTER THREE

The Inter-Service Organization for Overlord and the Order of Battle of the Invasion Forces

GENERAL EISENHOWER set up his headquarters, called Supreme Headquarters, Allied Expeditionary Force (SHAEF), at Bushey Park. My own headquarters was located at St. Paul's School in West Kensington, while the Allied Naval and Air Forces headquarters were both at Norfolk House in St. James Square.

Admiral Ramsay, Air Chief Marshal Leigh-Mallory and myself were jointly charged with planning and executing the assault and initial development of the lodgement area. Our respective staffs were closely associated in the production of the detailed plans and directives which guided the planning of our subordinate formations. On 1 February we presented for the Supreme Commander's approval an 'Initial Joint Plan', which provided the basis for planning the operation. Subsequently the Armies, with their associated naval and air force authorities, produced detailed plans of action, and the whole planning period culminated in the 'Presentation of the Plans' Exercise, staged in London on 7 April 1944, when commanders of the three Services explained their intentions and examination was made of the whole project. Subsequently the joint Commanders-in-Chief presented their final plans to the Supreme Commander.

My orders provided for an assault on a frontage of two armies, First United States Army on the right, employing two divisions, and Second British Army on the left, with three divisions. This arrangement of forces placed the American troops on the Atlantic flank, as they would ultimately be maintained direct from the United States. In conformity with this organization, the associated naval forces were organized into the Western Task Force working with First United States Army and the Eastern Task Force which was allied to Second British Army. These Task Forces were in turn divided into seven forces, one for each of the assault and follow-up divisions. The Eastern Naval Task Force comprised Forces S, G and J, with Force L as its follow-up; the Western Naval Task Force had Forces O and U in the assault, and Force B in the follow-up. The lettering of these Force designations corresponded (in the assault echelons) to the code-marking of the beach areas they were to attack.

Ninth United States Air Force planned with First United States Army, while Second British Army worked with Second Tactical Air Force, RAF.

The troops under my operational control comprised 21 Army Group and First United States Army (General Omar N. Bradley). The outline Order of Battle is shown in the adjacent chart, from which it will be seen that 21 Army Group comprised First Canadian Army (Lieutenant-General Crerar), Second British Army (Lieutenant-General Dempsey), the British Airborne Troops (Lieutenant-General Browning), and the various Allied contingents. Attached to First United States Army were the American 82 and 101 Airborne Divisions.

It was General Eisenhower's intention to assume direct command of the land forces on the Continent when the growing build-up of the American forces had led to the deployment of an American Army Group in the field. No definite period was stipulated for this, but Headquarters Twelfth United States Army Group were formed in London and prepared to take command of First and Third United States Armies at the appropriate time. Meanwhile I became responsible for co-ordinating the planning of Twelfth United States Army Group with a view to ensuring that there would be no interruption in the general conduct of operations when it took the field. Within the scope of this co-ordination were included plans made by Twelfth United States Army Group for introducing Third United States Army into the Continent.

In view of my responsibility towards United States forces I arranged with General Bradley for a proportion of American officers to join Headquarters 21 Army Group, to assist in the detailed planning, to ensure smooth and efficient liaison with the United States formations, to advise on the framing of orders and instructions having in mind the difference between the organization and staff procedure of the two Armies, and to take their share in the staff work of the operation until the American Army Group became operational. On the General Staff side the staffs were integrated, but the difference in the administrative systems of the two Armies proved so great that it was found preferable to attach a self-contained American administrative echelon to 21 Army Group. The American Brigadier-General in charge was appointed deputy to my Chief Administrative Officer (CAO) and the two staffs worked side by side so that their planning marched in step. Under the general co-ordination of 21 Army Group, First United States Army was responsible for its own detailed administrative planning, while longer term projects were handled by Twelfth United States Army Group. These arrangements proved eminently satisfactory and I would like to pay

tribute to the knowledge, efficiency and adaptability of the American officers who served with 21 Army Group staff.

I made a number of changes in 21 Army Group staff proper in order to introduce officers who had already had considerable experience in the field. I brought back from Italy a number of senior staff officers, including my Chief of Staff, Major-General de Guingand.

During the later planning stages some difficulties arose over the so-called 'levels' of command between the army and air forces authorities. As long as 21 Army Group was responsible for overall direction of the land battle, the appropriate air headquarters with which planning was conducted was Allied Expeditionary Air Forces; but when two Army Groups were later deployed under SHAEF, Headquarters Second Tactical Air Force was to become our associated air command. Longer term planning therefore suffered delays because co-ordination with two separate air force authorities was required.

It should be remembered that the highly complex Anglo-American organization set up for launching Overlord had little more than five months for the completion of its task, from the time the higher command was finally settled. Events have amply shown that a splendid spirit of co-operation was established between the British and American services, and that under General Eisenhower a strong, loyal team was quickly brought into being, while the various components of the great invasion force were welded into a fine fighting machine.

CHAPTER FOUR

The Plan

THE Initial Joint Plan has been mentioned as forming the basis for the detailed planning of operation Overlord. For my part, I will show that the basic principles of my plan for delivering the assault and for the subsequent development of operations were decided upon early in the planning stage, and these were never altered or modified but were carried through relentlessly to a successful conclusion. In matters of detail, however, the plan was subject to seemingly endless alterations and amendments which continued until the last moment before D-day. This was inevitable because, to take a primary example, the situation concerning the enemy forces in western Europe and the strength and organization of the Atlantic Wall defences were developing through the planning period. Again, uncertainty about the precise availability by types of the various landing craft persisted for a considerable period and had repercussions on the detailed planning of all subordinate formations: down to the actual assaulting units.

In describing the plan I shall indicate the final D-day version, and the factors which were known to us at that time, though in some matters it may be of interest to describe the changing circumstances which made amendments to the plan necessary.

BASIC CONCEPTION OF THE ARMY PLAN

The intention for operation Overlord was to assault, simultaneously, beaches on the Normandy coast immediately north of the Carentan estuary and between the Carentan estuary and the River Orne, with the object of securing as a base for further operations a lodgement area which was to include airfield sites, the port of Cherbourg and the ports of Brittany.

To achieve this task I decided upon the plan of the land battle and subsequently explained it myself to the General Officers of the Field Armies in London on 7 April 1944.

Once ashore and firmly established, my plan was to threaten to break out of the initial bridgehead on the eastern flank—that is, in the Caen sector. I intended by means of this threat to draw the main enemy reserves into that sector, to fight them there and keep them there, using the British and Canadian armies for the purpose. Having got the main enemy reserves committed on the eastern flank, my plan was to make the break-out on the western

flank, using for this task the American armies under General Bradley, and to pivot the whole front on Caen. The American break-out thrust was to be delivered southwards down to the Loire and then to be developed eastwards in a wide sweep up to the Seine about Paris. This movement was designed to cut off all the enemy forces south of the Seine, over which river the bridges were to be destroyed by air action.

This strategy was evolved from consideration primarily of the layout of enemy reserve formations in western Europe, the run of rail and road communications leading to Normandy and the immediate task of the operation: which was to secure ports. The capture of the Cotentin and Brittany peninsulas and the opening of the ports located in them meant that we required to make rapid territorial gains in the west; on the eastern flank, acquisition of ground was not so pressing providing the air force requirements for airfield construction could be met. This pointed to the need for breaking out on the American front. If in turn the expansion in the west were to proceed rapidly, we had to draw the enemy weight away from that flank and in this we were greatly assisted by the immense strategic importance of Caen.

The city of Caen was a vital road and rail communication centre through which the main routes from the east and south-east passed. Since the bulk of the enemy mobile reserves was located north of the Seine they would have to approach Normandy from the east and might be expected to converge on Caen. Hence if a major threat to the enemy containing forces could be developed and sustained in the Caen sector, his reserves would tend to become initially committed there.

It was to be expected that the enemy would react strongly to an advance on Caen; such a course would indicate to him our intention to break through the Caen bottleneck in order to exploit our armoured resources in the more open country to the south-east. This direction would moreover give us the shortest approach to the Seine ports and Paris.

These arguments convinced me that strong and persistent offensive action in the Caen sector would achieve our object of drawing the enemy mobile reserves on to our eastern flank.

This was my original conception of the manner in which the Battle of Normandy was to be developed. From the start it formed the basis of all our planning, and was the aim of our operations from the time of the assault to the final victory in Normandy. I never once had cause or reason to alter my plan. In order to understand the Battle of Normandy, it is essential that this fact should be clearly appreciated.

THE ENEMY SITUATION

The German commander in France and the Low Countries was Field Marshal von Rundstedt; his title was Commander-in-Chief West. Under his command were two Army Groups: the larger, comprising more than two-thirds of the operational troops available, was Army Group "B", commanded by Field Marshal Rommel, which consisted of Seventh Army (Normandy and Brittany), Fifteenth Army (Pas de Calais and Flanders) and 88 Corps (Holland). Rommel was appointed to this command in February 1944 at the direct instance of Hitler. It was his first operational command since he had left Tunisia, nearly a year previously.

Army Group "G", commanded by Blaskowitz, had the First and Nineteenth Armies, stationed on the Biscay coast and in the Riviera respectively.

There was a third headquarters in France of Army Group status, called Panzer Group West under General Schweppenburg. It was responsible for the administration and training of the Panzer formations while they were operationally under command of the other Army Groups. It was originally intended to command them in battle. This system later led to some confusion in the handling of the enemy armour.

These Army Groups at D-day comprised some sixty divisions, or about one quarter of the field force of the German army. From the end of 1943 their strength was conserved, and even increased, in anticipation of the Second Front, and in spite of losses in Italy and Russia. The only formation which left the theatre in 1944 was an SS Corps, which was despatched to Russia in April, but returned to Normandy within two months.

There was considerable variation in the quality of the German divisions in the west. The equipment, training and morale of the SS and Panzer divisions was of the highest order; the infantry formations varied from low quality static coast defence troops to fully established field formations of normal German type.

For several years the Germans had been developing the coastal defence organization, which was known collectively as the 'Atlantic Wall'. The enemy assumed that an invader would have to secure a port either in the initial assault, or very quickly afterwards, in order to land the heaviest types of equipment and organize maintenance and supply. Port areas were therefore given first priority for defence, and by 1944 had become virtually impregnable to seaward assault. After the ports, attention was turned to the Pas de Calais which bordered the narrowest part of the Channel and was considered the most likely area we would choose for the assault.

Elsewhere defences were on a less organized scale, for by the beginning of 1944 the enemy had not had the resources or transport to put the whole coast line in a uniform state of defence. From March 1944, however, there was a most noticeable intensification of the defences in Normandy, following a tour of inspection by Rommel.

The coastal defence of the Baie de la Seine was based on a system of linear defences, arranged in strong points which were manned chiefly by static coastal troops of low category. The gun positions and localities were protected by concrete and armour from naval gunfire and air attack, and extensive use had been made of minefields, wire entanglements and obstacles to strengthen the layout. Extensive flooding of the low-lying areas in the coastal belt had been effected particularly in the marshy country round the Carentan estuary. Existing sea walls had been strengthened and prolonged to form anti-tank obstacles behind the beaches, which themselves were extensively mined. On the beaches and extending over varying distances below high water mark were belts of under-water obstacles, the purpose of which was to halt and impale landing craft and to destroy or cripple them by means of explosive charges attached to the individual obstacles; types of under-water obstacles included 'Element C' with Tellermines on the forward face, the ramp type wooden obstacle with Tellermines at the top of the ramp, wooden posts with Tellermines attached, steel hedgehogs and steel tetrahedra.

The enemy artillery defence consisted of long range coast artillery and field artillery. The former was sited well forward, covering in particular the entrances to Cherbourg, the Carentan estuary and the Seine. Heavy gun batteries located in the Cherbourg area and round Le Havre almost overlapped in range and presented the gravest danger to the approach of all large vessels to the transport area off the Normandy beaches. Behind the coast artillery, some two or three miles inland, field and medium artillery units of the divisions occupying the coastal sectors were sited; the task of these guns was to bring fire to bear on craft approaching the beaches and on to the beaches themselves. In all there were some thirty-two located battery positions capable of firing on the assault beach areas.

After Rommel's inspection there was an acceleration in the construction of under-water obstacles and these were developed at increasing distances below high water mark; the number of coastal batteries increased and the construction of casemates and overhead cover was undertaken on a wider scale. Flooding became more extensive. Anti air-landing obstacles commenced to appear on our air photographs in the most suitable dropping and landing areas; they consisted of vertical poles and stakes, and in some cases were fitted with booby traps.

The enemy dispositions in the west up to D-day reflect the conflict of opinion between Rommel and von Rundstedt on the manner in which invading forces should be dealt with. Rommel, who was no strategist, favoured a plan for the total repulse of an invader on the beaches; his theory was to aim at halting the hostile forces in the immediate beach area by concentrating a great volume of fire on the beaches themselves and to seaward of them; he advocated thickening up the beach defences, and the positioning of all available reserves near the coast. Von Rundstedt on the other hand, favoured the 'crust-cushion-hammer' plan; this implied a 'crust' of infantry manning the coast line, with a 'cushion' of infantry divisions in tactical reserve close in rear, and a 'hammer' of armoured forces in strategic reserve further inland. The cushion was designed to contain enemy forces which penetrated the crust, and the hammer was available for launching decisive counter attacks as required. These differing theories led to a compromise; the armoured reserves were generally kept well back, but the majority of the infantry divisions was committed to strengthening the crust. The result was that, in the event, the Panzer divisions were forced to engage us prematurely and were unable to concentrate to deliver a co-ordinated blow until it was too late.

In the Neptune sector we anticipated an enemy garrison of three coast defence divisions supported by four reserve divisions, of which one was of the Panzer type. In the last weeks before D-day, however, we had indications that some redistribution of enemy forces was taking place in France, but in the event our appreciation of the resistance proved substantially correct.

The estimated rate of enemy build-up and the probable development of his defensive strategy were constantly reviewed during the planning period. The speed of concentration of enemy reserves was largely dependent on the success of our air operations designed to reduce his mobility, together with the effect of sabotage activities of the French Resistance organization. Events showed that we achieved a degree of success in this direction far greater than we had hoped. At this stage of the planning, it was estimated that the enemy could concentrate up to twenty divisions (including eight Panzer divisions), in the Normandy area by D+6. This contrasted with the earlier Cossac estimate of twelve divisions. By D+20, under the worst conditions for ourselves, we might expect opposition from some twenty-five to thirty divisions, of which nine or ten would be armoured formations. We had to anticipate the possibility of the enemy having up to fifty divisions in action by D+60.

We believed that the Germans would be alerted in the Neptune area on the night D-1 as our seaborne forces approached

the Normandy coast, and that by the end of D-day the enemy would himself have realized that Overlord was a major operation delivered in strength. In accordance with his policy of defeating us on the beaches, it was to be expected that he would summon initially the nearest available armoured and motorized divisions to oppose us, and that in the first stages we should have to meet immediate counter attacks designed to push us back into the sea. Having failed in his purpose we considered that the enemy would concentrate his forces for major co-ordinated counter attacks in selected areas; these might develop about D+4 or D+5, by when it was estimated that he might have in action against us some six Panzer divisions. By D+8 it was reasonable to suppose that, having failed to dislodge us from the beaches, the enemy would begin to adopt a policy of attempting to cordon off our forces and prevent expansion of the bridgehead. For this he would require to bring up infantry in order to relieve his armoured formations, which would then be concentrated for a full-out counter stroke. We had to expect, then, an initial concentration against the bridgehead of armoured and motorized divisions, followed by the arrival of infantry formations.

There were encouraging factors in the Intelligence appreciations in April and May. Whereas in January 1944 it had been appreciated that within two months of the start of Overlord the enemy would be able to move as many as fifteen divisions into western Europe from other theatres, the corresponding estimate in April was six, as a result of the mounting successes of the Soviet forces on the Eastern Front and of events in Italy. By D-day the Allies had captured Rome and Kesselring's forces in Italy were in retreat, while in Russia the Crimea had been cleared and the Germans were nervously predicting an all-out Russian offensive. Identifications on the Eastern Front and in Italy received in the immediate pre-D-day period gave an increasingly encouraging picture of absorption of German armour on fronts other than our own.

TOPOGRAPHY

The inundations behind the selected beach areas, and particularly in the Varreville sector at the base of the Cotentin peninsula, created a grave problem in ensuring the creation of adequate exits from the beach areas to the hinterland. In the Varreville sector it was of the utmost importance for us to secure the causeways across the flooded areas if we were to avoid being pinned by relatively minor enemy forces to the very narrow beach strip. In the Vierville-Caen sector beach exits tended to canalize through small coastal villages, which were in a state of defence

and had been provided with extensive obstacles. They would require speedy clearance by our assaulting troops. The system of water lines, inundations and marshes behind the Carentan estuary was extensive and there were few available routes crossing these barriers; the seizure of these routes intact was of the utmost importance.

The hinterland behind the beaches generally favoured defensive tactics and was on the whole unsuitable for the deployment of armoured forces.

Apart from the open rolling plain to the south-east of Caen, the area was covered to a depth of up to forty miles inland by 'bocage'—pasture land divided by unusually high hedges, banks and ditches into many small fields and meadows. In such conditions, observation was extremely limited, and movement off the road defiles was very restricted: not only for wheeled transport, but often for tanks. On the other hand it was ideal infantry country; there was excellent concealment for snipers and patrols, while defensive positions dug into the banks were well protected from tanks and artillery.

The Normandy highlands ran from south-east to north-west across the invasion frontage, at a depth of up to twenty-five miles inland. The country was broken and irregular in parts, with steep hills and narrow valleys. The dominating feature of the northern ridge was Mont Pincon, some eighteen miles south-west of Caen.

PRELIMINARY OPERATIONS

In the broad strategic sense, preparations for the invasion of north-west Europe began at sea and in the air many months before D-day. Winning the Battle of the Atlantic was essential to ensure the passage of the vast volume of personnel and stores from America and Canada to the battle front. The strategic air offensive against Germany had a vital effect on the war by strangling the whole economic structure of the country.

We are here concerned, however, with the more directly military aspect of preparatory air operations which paved the way for the assault on Normandy.

An essential preliminary to the assault was the reduction of the German Air Force to the degree required to ensure mastery in the air over our seaborne forces in the Channel and over the beaches on the invasion coast. The next army requirement was the interdiction of rail and road communications, with the object of delaying the movement of enemy troops and supplies to the battle area. We also wanted to mislead the enemy about the sector selected for the assault and, lastly, to pave the way for our actual landing operation by pre-D-day air attacks against coast defences

and installations. Other preliminary air tasks of direct importance to the army were the flying of reconnaissance missions over a wide area, and the prevention of enemy reconnaissance over our centres of concentration and embarkation.

So admirably were these commitments carried out by the Air Forces that we were afforded immunity from enemy air reconnaissance during the vital period, a factor of first importance in the design for achieving tactical surprise in our assault operation; moreover, not one single attack was carried out by the German Air Force on the assault forces during the sea passage or at any time on the beaches during D-day.

The interdiction of rail communications was effected as a result of a detailed plan for destroying the servicing and repair facilities which were essential for the operation of railways in northern and western France, the Low Countries and western Germany. In full operation by D-60, the programme brought attacks closer to the Neptune area as time grew shorter, and the result was a shortage of locomotives and stock, repair facilities and coal over a wide area, while seventy-four bridges and tunnels on routes leading to the battle area were impassable on D-day. Reports on 7 June showed that all railway bridges over the Seine between Paris and the sea were impassable, and also those on the lower section of the Loire. Road bridges were also attacked with most successful results; the thirteen bridges between Paris and the Channel, and the five main road bridges between Orleans and Nantes, were either destroyed or damaged.

Attacks prior to D-day on coast defence batteries in the Neptune area were worked into an overall plan of action against the whole length of the invasion coast, in order to mislead the enemy about our intentions. These operations retarded the construction of overhead cover for major batteries covering the Baie de la Seine, and at the same time served to increase the enemy's fears that we were intending to assault in the Pas de Calais: astride Cap Gris Nez. This was a matter of first importance in our plans.

Preliminary naval operations included sweeps against enemy U-boats, R-boats and E-boats, and minelaying designed to afford protection to the sea passage across the Channel.

THE ASSAULT

The overall plan of assault was designed to concentrate the full weight of the available resources of all three Services in getting the assaulting troops ashore and in assisting them in their task of breaking through the Atlantic Wall.

First United States Army was to assault astride the Carentan estuary with one regimental combat team between Varreville

and the estuary (Utah beach), and two regimental combat teams between Vierville and Colleville (Omaha beach). The initial tasks were to capture Cherbourg as quickly as possible and to develop operations southwards towards St. Lo in conformity with the advance of Second British Army.

Second British Army assault was to be delivered with five brigades between Asnelles and Ouistreham (Gold, Juno and Sword beaches), with the initial task of developing the bridgehead south of the line St Lo—Caen and south-east of Caen, in order to secure airfield sites and to protect the eastern flank of First United States Army while the latter was capturing Cherbourg.

The inter-army boundary made Port-en-Bessin, and the line of the River Drome to Englesqueville, inclusive to Second British Army.

During the night preceding D-day, while the naval assault forces made the sea passage, the programme of intensive air action against the enemy defences was to begin with operations by Bomber Command, while airborne forces were to be dropped on the flanks of the invasion area. At H-hour, supported by naval bombardment and air action and by the guns, rockets and mortars of close support craft, the leading wave of troops was to disembark and force its way ashore.

The total initial lift in the assault and follow-up naval forces was of the order of 130,000 personnel and 20,000 vehicles, all of which were to be landed on the first three tides. In addition to the basic eight assaulting brigades/regimental combat teams, a variety of attached troops were required in the assault including special assault engineers, amphibious tanks, and other detachments which varied for the different beaches according to the specific 'menu' (*i.e.*, composition of the assault wave) decided upon by the subordinate formations. The total forces to be carried in the initial lift consisted of the essential combat elements (with minimum transport) of:

First United States Army:

- Three infantry divisions
- Five tank battalions
- Two Ranger battalions
- Corps and Army troops
- Naval and Air Force detachments.

Second British Army:

- Four infantry divisions (less two brigade groups)
- Three assault tank brigades
- One armoured brigade
- Two SS brigades (Commandos)
- Corps and Army troops
- Naval and Air Force detachments.

Priority of air lift was given to American airborne forces owing to the vital tasks of securing the beach exits and facilitating deployment from the Utah beach. Main bodies of both 82 and 101 United States Airborne Divisions were to land in the general area of Ste Mere Eglise on the night D-1/D, the latter to assist the seaborne assault on the Utah sector and the former to guard the landward flank and prevent the movement of enemy reserves into the Cotentin peninsula. The remaining air lift was allotted to Second British Army for 6 Airborne Division (less one brigade) which was to land before H-hour east of Caen, with the tasks of seizing the crossings over the Orne at Benouville and Ranville and, in conjunction with Commando troops, of dominating the area to the east of Caen in order to delay the movement of enemy forces towards the town.

American Ranger units were to land in the assault on the west of Omaha beach and had the task of attacking enemy defences on the east side of the Carentan estuary. One British brigade of two Commandos was to link the assaults on the Juno and Sword sectors. A second Commando brigade was to land behind the assaulting division on the Sword sector and while one Commando dealt with Ouistreham, the remainder of the brigade was to cross the Orne at Benouville and attack the enemy coast defences east of the river up to Cabourg inclusive.

The assault technique

Prolonged study and numerous experiments had been devoted to the development of the technique of assaulting a defended beach. As a result, various types of specialized military equipment were available by D-day, including assault engineer tanks, tank-carried bridges for crossing anti-tank ditches, mat-laying tanks for covering soft clay patches on the beaches, ramp tanks over which other vehicles could scale sea walls, flail tanks for mine clearance, and amphibious assault tanks. These devices were integrated into the specially trained assault teams which led the invasion forces.

The development of under-water obstacles on the invasion coast has already been mentioned, and it was necessary to include in the assault some teams of sappers trained in clearance of this type of obstruction. These obstacles also affected the decision on the tidal conditions required at the time of commencing the assault, because the engineers could not work on demolishing them until they were uncovered by the tide.

The selection of D-day and H-hour

The determination of H-hour, defined as the time at which the leading wave of assault craft should hit the beach, and of

D-day for the assault, was made only after a prolonged and intensive study of the various factors affecting them.

In the first place it was jointly decided that H-hour should be in daylight, and that there should be moonlight during the preceding night. From the naval point of view a daylight assault facilitated station keeping and deployment of the vast armada of ships and craft employed, and also the accurate location of the beaches. Moreover, in order to provide accurate naval gunfire and air bombardment against the enemy defences immediately before H-hour, a period of daylight was necessary for observation. These advantages were considered to outweigh the drawbacks of allowing the enemy time to engage by observed fire our ships and craft before the assault began, and of making our troops advance to the attack in daylight; we had such preponderance of naval and air resources that we counted on stunning the defenders with the weight of our bombing and shellfire. The moonlight preceding H-hour was preferred for facilitating naval movements and the approach of airborne forces.

Having decided on a daylight assault, it was in the Army's interest to fix H-hour as early after first light as possible, so that the defenders would have the minimum time for observation of our movements, and in order to conserve as many hours of daylight as possible for landing the follow-up on the second tide before nightfall. There would be a period before sunrise when aircraft spotting for naval guns, and heavy bombers observing above the target area, would be able to see sufficient for their purpose before the visibility became clear for defenders at sea level. The crux of the problem was to decide upon the minimum time required for effective engagement of shore targets by the naval guns and for delivery of the bomb loads by our air formations; eventually the period from nautical twilight (the first sign of morning light) to forty minutes later was accepted as sufficient for our needs.

Tidal conditions had now to be considered. The timing of H-hour had to be related to the height of the tide for naval reasons and because of the necessity to deal with under-water obstacles: which were sited to offer maximum interference at high water and which could not be demolished by sappers unless exposed by the tide.

The obstacles could most easily have been dealt with if the troops had landed at low water, but at low tide the landing craft would have grounded so far from the shore that assaulting infantry would have had to cross a wide stretch of exposed beach before closing with the defences; moreover the beach surfaces in some cases were so uneven that troops wading ashore from the low tide mark would have dropped into hollows deeper than the height of a man before reaching dry land. Again, it was desirable to have

as many hours as possible of rising tide upon which to land the supporting arms and enable the landing craft to retract; but the flow of the tide until about three hours before high water, and from three hours after, was so fast that there would have been insufficient time to discharge the landing craft before they became completely grounded.

From a consideration of these factors it was decided that the best conditions would obtain if H-hour were fixed forty minutes after nautical twilight on a day when at this time the tide was three hours before high water mark. These conditions could not be obtained on all beaches simultaneously, because the flow of the tide up the English Channel resulted in high water occurring in the Utah area about forty minutes earlier than in Sword area. This fact, together with the difference in positioning of underwater obstacles on the various beaches, and complications due to the rock outcrop on Juno beach, led to the decision that a separate H-hour should be fixed for each beach. This inevitable compromise resulted in the right-hand beaches having the bare minimum period for observed fire prior to the assault, whereas the left-hand beaches had considerably more than had been deemed essential. On the day ultimately selected H-hour varied between 0630 for the Western Task Force to 0745 on the east sector of Juno area.

The selection of H-hour to fill these many requirements restricted the days suitable to three in every fortnight or, with moonlight, to three in every month. I have already explained that, while the target date was set for 31 May, the Supreme Commander had specified at the time that tidal and other conditions might cause D-day to be selected during the first week in June—in fact 5 June was determined as the first of a three-day period suitable for the operation. Elaborate arrangements were made for weather forecasting, and for a machinery of postponement should this become necessary; but it should be noted that, had the weather been unsuitable in the first three-day period, a postponement of at least a fortnight, and more probably a month in order to have moonlight conditions, would have been inevitable.

The Joint Fire Plan

The purpose of the Joint Fire Plan was to allocate tasks to the resources of the three Services with the object of assisting the Army to get ashore. The chief requirements were to destroy or neutralize the enemy coast artillery batteries which might interfere with the approach of the naval convoys or bring fire to bear on the anchorages, and to neutralize the enemy strong points and defended localities that were sited for the immediate defence of our assault beaches.

It has been shown that preliminary air attacks were delivered against enemy coast defence batteries in the preliminary operations prior to D-day. The Fire Plan proper was to begin on the night preceding the assault, when the heavy bombers of Bomber Command were to attack in great strength the ten most important batteries: the operation was to be timed as late as would be consistent with the return of the aircraft to England by daylight. Following the Bomber Command operations attacks were planned by medium bombers, using special navigational devices, on a further six coast defence targets; this phase was to begin at civil twilight and about the same time bombardment was to start from assault craft carrying various types of armament. Shortly afterwards, naval gunfire directed by spotting aircraft was timed to commence, and about half-an-hour before H-hour the heavy bombers of the Eighth United States Air Force and medium bombers of the Ninth United States Air Force were to begin action against coast defence artillery and enemy beach defences and localities. Included in the naval assault forces was a variety of specially fitted craft carrying 4.7 inch guns, 4-inch mortars, barrages of 5-inch rockets, Centaur tanks fitted with 75 millimetre howitzers, 17-pounder anti-tank guns, as well as ordinary self-propelled field guns of the assaulting divisional artilleries which were to be embarked in Tank Landing Craft and to work as regimental fire units.

The Fire Plan aimed at building up the supporting fire to a tremendous crescendo which would reach its climax at the latest possible moment before the leading troops waded ashore, in order to give the defenders the minimum time to recover before being set upon. The heavy air bombardment was timed to continue on the beach frontages to within ten minutes of H-hour, and from this time fighters and fighter-bombers were to take up the air offensive, and in particular undertake the task of neutralizing the enemy field batteries located inland. Air support tentacles were to accompany the assaulting troops, and fighter bomber squadrons were to be at hand to answer calls for close support, while the medium and heavy bombers returned to their bases to refuel and re-arm in readiness for further missions. No fewer than 171 Allied fighter squadrons were to be employed in the overall assault phase, and in the event the Allied air forces flew some 11,000 sorties on D-day.

DIRECT AIR SUPPORT ARRANGEMENTS

The joint army and air forces organization for direct air support becomes a complicated machinery in major amphibious operations. Special arrangements are necessary to cover the period

before the army and air force headquarters and control staffs are set up on the far shore and the air formations arrive overseas.

For the assault, the problem was complicated by the location of Headquarters Allied Tactical Air Forces at Uxbridge, while the Naval and Army Group Headquarters were at Portsmouth during the assault phase. It thus became necessary to set up the army component of Air Support Control at Uxbridge, together with a special intelligence staff which was charged with supplying the air staff with information concerning the progress of operations. The Anglo-American army staff at Uxbridge was controlled from my main headquarters at Portsmouth, and worked in matters of immediate air support on general directives, which defined the military plan and priorities for the application of the available direct support air effort. Under the conditions of the initial stage of amphibious operations it will invariably be necessary to move the focus of control of army/air operations back to Army Group level, because of the necessary centralization imposed on the Air Forces and because the normal point of control (Army Headquarters) has no Air Force counterpart with it and no air formations within reach or communication.

Special assault tentacles were allotted to all assaulting brigades and were to provide the initial means for requesting air support, pending the landing of the normal detachments. These tentacles worked to Uxbridge, while on the same network were included Divisional and Corps headquarter ships as well as Army and Army Group headquarters. Army headquarters were to monitor calls for support, but the responsibility for their submission to the Tactical Air Forces rested with the Army Group detachment at Uxbridge.

In order to provide means of immediate response to calls for air assistance during the assault, some squadrons were airborne within wireless range of divisional headquarter ships in anticipation of requests for direct support.

Requests for pre-arranged air support during the assault phase were co-ordinated at main Army Group headquarters and submitted to the air forces through the Uxbridge staff. The latter also co-ordinated the bomblines and ensured that all concerned were kept informed.

THE COVER PLAN

The Cover Plan employed in connection with these operations formed part of the co-ordinated Allied deception measures which embraced all the European battle fronts.

It was clearly impossible to hide from the enemy the pre-

parations being made in the United Kingdom and, as D-day approached, the concentrations of shipping and craft in southern England would indicate our intention to strike across the Channel. The Cover Plan therefore aimed at misleading the enemy about the area of attack, and at persuading him that we should not be ready to launch the assault until about six weeks after the actual date selected for D-day.

Prior to D-day the plan was to indicate to the enemy that the assault was to be delivered in the Pas de Calais, astride Cap Gris Nez. After D-day, our object was to show that the Neptune assault was a preliminary and diversionary operation designed to draw German reserves away from the Pas de Calais and Belgium and that our main attack was still to be delivered in the Pas de Calais.

Our air action prior to D-day was carefully controlled in order to indicate the Pas de Calais as the intended area of assault. Whatever bombing effort was expended in the Neptune area, twice the amount was delivered in the Pas de Calais, where coast defence guns, enemy defended localities and installations were the targets. Large numbers of dummy landing craft were assembled in ports in south-east England where dummy hard standings, full scale embarkation signposting and other visible signs of preparation were made obvious. American and Canadian troops were moved into the Dover-Folkestone area to lend credence to the idea.

These deception measures continued, as planned, after D-day and events were to show that they achieved outstanding results and in fact played a vital part in our successes in Normandy.

DIVERSIONARY OPERATIONS

In connection partly with the main operation and partly with the Cover Plan, a series of diversionary operations was mounted.

The plan provided for two diversions which were carried out by specially equipped naval craft and aeroplanes, one in the Straits of Dover and the other near Cap d'Antifer. In both operations radio counter measures were employed to give the same appearance to enemy radar as that given by the real naval invasion forces. It is now known that these diversions were successful and were instrumental in enabling our forces to continue far towards the enemy coast before their true position could be determined.

Dummy paratroops were dropped in three main areas in order to confuse the enemy about the destination of our airborne forces and cause delay and temporary dispersion of hostile forces employed in clarifying the situation.

S.A.S. ACTIVITIES AND THE FRENCH RESISTANCE GROUPS

Plans were made for ensuring as far as possible the co-operation of the French Resistance Movement in our operations. Arms and equipment had been delivered by air to the French over a long period and a network of wireless communications had been set up. Arrangements were made to pass instructions and guidance concerning sabotage to the Resistance leaders and to alert their organizations as soon as the invasion began.

A considerable number of our own Special Air Service troops were dropped in France with sabotage missions designed to delay the movement of enemy reserves. In many cases these troops linked up with Resistance personnel who afforded them ready assistance.

THE BUILD-UP

The general principles upon which the build-up of our forces and material was planned were, first, the provision of the maximum number of fighting formations on the Continent in the first few days and, secondly, the introduction into the build-up system as quickly as possible of the maximum degree of flexibility: so that changes in priority of troops, administrative echelons, transport and stores could be made as the situation demanded.

By the end of D-day it was planned that, including airborne forces, the Allies would have eight divisions ashore together with Commandos, Ranger battalions and some fourteen tank regiments. By D+6 the total forces would rise to some thirteen divisions, exclusive of airborne formations, with five British armoured brigades and a proportionate number of American tank units. Between twenty-three and twenty-four basic divisions were due in Normandy by D+20. Comparison with the estimated enemy strength was difficult to make; some types of enemy division were organized on a considerably smaller establishment than our own; some were under conversion from training organizations and were known to be deficient of equipment. Our own build-up, moreover, included a considerable proportion of fighting units classed as corps and army troops and which, therefore, were not apparent in the divisional figures of the build-up table.

Planned build-up tables are inevitably suspect; it was impossible to estimate the delaying effect on the enemy build-up of our air action, or the success our Cover Plan arrangements would achieve in causing a dispersion of German resources. In our own estimates, the effect of weather on cross-channel movement and beach working was a major imponderable.

In order to make our build-up plans flexible, a special inter-Service staff was organized called 'Build-Up Control' (BUCO).

This body was formed, as a result of Mediterranean experience, to organize the loading and despatch of craft and ships from home ports, and was the agency by which changes in priority were effected.

It is of interest to record that in order to fit the assault forces into the available craft and shipping, British divisions were limited to 1450 vehicles in the initial lift, the corresponding figure for armoured brigades being 320. No formation was to be made up in excess of 75 per cent of its War Establishment in transport until after D+14. Similar limitations were imposed on the American units.

PLANNED DEVELOPMENT OF OPERATIONS

I have already outlined my broad strategic plan for the development of operations designed to secure the lodgement area.

Once the troops were ashore it was necessary for them to 'crack about'; the need for sustained energy and drive was paramount, as we had to link our beachheads and penetrate quickly inland before the enemy opposition crystallized. I gave orders that the leading formations should by-pass major enemy centres of resistance in order to 'peg out claims' inland. I emphasized to commanders on all levels that determined leadership would be necessary to withstand the strain of the first few days, to retain the initiative and to make sure that there would be no setbacks.

In the planning stages of a major operation it is customary to issue for the guidance of subordinate commanders and staffs, an estimate of the progress of operations. Such an estimate normally takes the form of a series of 'phase lines' drawn on an operational map to indicate the positions to be reached by leading troops at intervals of a few days. The phase line map for the operations was produced in April 1944. I was not altogether happy about this phase line map, because the imponderable factors in an operation of the magnitude of Overlord make such forecasting so very academic. While I had in my mind the necessity to reach the Seine and the Loire by D+90, the interim estimates of progress could not, I felt, have any great degree of reality. The predictions were particularly complicated by two major divergent requirements. On the one hand the general strategic plan was to make the break-out on the western flank pivoting the front on the Caen area, where the bulk of enemy reserves were to be engaged; on the other hand the Air Forces insisted on the importance of capturing quickly the good air-field country south-east of Caen. Though I have never failed in my operations to exert my utmost endeavour to meet the requirements of the Air Forces, in planning these operations the

over-riding requirement was to gain territory in the west. For this reason, while accepting an estimate for seizing the open country beyond Caen at a relatively early date after the landing, I had to make it clear that progress in that sector would be dependent on the successful development of the main strategic plan.

ADMINISTRATION

The administrative problem facing the British forces was essentially different from that of the Americans. The operational plan demanded the very rapid development of lines of communication behind the American forces, and the administrative requirements for opening up railways and roads from Cherbourg and the Brittany ports were very large. There was no parallel problem foreseen on the British flank.

The limiting factor in the build-up of operational forces appeared likely to be the rate at which maintenance resources could be landed. The problem therefore was to develop the capacity of the beaches to the maximum degree. Since there would be no port facilities at all until Cherbourg was captured and opened, and since in any case Cherbourg would not be able to do more than relieve some of the burden of beach maintenance, it was planned to erect two artificial harbours, together with a number of breakwaters, in the Baie de la Seine. The components which made up these artificial harbours were to be towed across the Channel in special lanes through the minefields, and although the estimated time required for their construction was from fourteen to forty-two days, it was provided that as far as possible use would be made of the shelter of the outer breakwaters once they had been completed. The subsidiary breakwaters were to be formed by sinking sixty block ships in groups of twelve at suitable sites along the coast.

The British forces were to be maintained over the beaches until such time as sufficient ports were captured and developed, and it was assumed that beach maintenance could cease on the opening of the Seine ports. In the United States sector it was planned to open Cherbourg and subsequently the main ports of the Brittany peninsula, and in this way to dispense gradually with the necessity for beach working.

Special establishments were created for operating the British beaches, comprising Beach Bricks, Beach Groups and Beach Sub-Areas. These special units and headquarters were formed on an inter-Service basis and included detachments of the various arms. In this way the individual beaches were worked by self-contained organizations.

It was planned to maintain Second British Army for the first few days from Beach Maintenance Areas and subsequently from two army roadheads, one of which was ultimately to be handed over to First Canadian Army; a Rear Maintenance Area was to be established as soon as conditions permitted. In view of the damage caused by our bombing, it was considered necessary to be independent of railways for the first three months of the operation; the lines of communication were therefore to be entirely road operated for this period.

The administrative planning for the operations was based on the expectancy of reasonable weather conditions during June, July and August. Some allowance was made in planning the rate of administrative build-up for days when the beaches would be working at low capacity; but the risk had always to be faced that any serious or prolonged break in the weather, particularly during the first two weeks, might have a grave effect on the maintenance of the forces and therefore on their operational capabilities.

CIVIL AFFAIRS

Civil affairs planning initially aimed at ensuring that the civil population did not impede troop movements, at preparing for the organization of local labour and transport, and at setting up the necessary machinery for the control and use of local resources and for the replacement of unacceptable local officials. It was anticipated that there would be a large number of refugees and civilian wounded, and special composite detachments of Civil Affairs personnel were organized in readiness to deal with the problem, while arrangements were made for food and medical supplies for the inhabitants of the bridgehead to be phased in from D+1 onwards.

REFLECTIONS ON THE PLANNING PERIOD

In retrospect, the major drawback of the inter-Service planning organization on the Army Group level prior to D-day was the lack of a single joint Service commander. Experience indicated that the speed and efficiency of planning the initial phases of the operation might have been greatly improved had there been some set-up on the Army Group level analogous to the United States Task Force system, with a Task Force Commander. It must be realized that the commanders of this operation were appointed only five months before D-day, and however much preliminary work may be done on a plan, no finality can be reached until the commander responsible has taken up his appointment.

Had the Task Force system been adopted, I realize that con-

siderable changes in the command set-up of the Naval and Air Forces would have been necessary; but the fact remains that the system employed in Overlord led to delays caused by the necessity for briefing and holding conferences between the high-ranking commanders on various levels. In particular, the fact that the Allied Air Forces were divided into commands held by parallel commanders-in-chief reacted on the speed of military planning because it frequently took long periods and many lengthy meetings in order to finalize, in a co-ordinated form, the plan of the various Air Forces in support of the land operation.

In considering the time available for planning, it was regrettable that the command set-up and appointment of the commanders were so much delayed. The responsibility and importance of the task laid upon the commanders and staff, and the truly formidable amount of detailed work required for such a gigantic undertaking, would imply that no effort should have been spared to ensure that those concerned had time to discharge their functions under reasonable conditions. In the event, by D-day, when they should have been fit and fresh for the start of the great adventure, in many cases the staffs were bordering on a state of exhaustion.

From the military point of view, the most difficult single factor during the period of planning was the delay in deciding the higher headquarters organization of the Allied Air Forces. This delay was not a purely Air Force concern, and planning in the Army suffered commensurate delays, because speedy solution of inter-Service problems could not be made until the various Allied Air Force headquarters and responsibilities had been clarified.

The detailed composition of the Naval assault forces, which was determined by the availability of the various types of landing ships and craft, was not finalized until relatively late in the planning period. Since every alteration in allocation of craft calls for changes in the landing tables, and often even in local assault plans, the constant amendments imposed a tremendous burden of work on the Army staffs at all levels.

It was fully realized during the planning period how very dependent we were going to be upon the weather, and every reasonable allowance was made for the effect that adverse conditions in the Channel might have upon the project. In making such allowances we assumed an average run of weather conditions, which were deduced from a study of the twenty preceding years. In the event, the development of our operations had to be made in spite of unprecedented weather conditions throughout the summer and autumn. This fact must be borne in mind when the story of our campaign in France and the Low Countries is studied, because it had a deterrent effect on our planning; indeed, at one

period soon after D-day it was the major cause of a serious reduction in the tempo of our operations.

There was one matter connected with the detailed planning which may be worthy of comment. In the first days of the invasion it was of primary importance to ensure that nothing was carried over to the Continent unless it was vital to the conduct of operations. With this in view, repeated and detailed examination was made at all levels in the chain of command, of the Order of Battle and Troop Lists of personnel, vehicles and stores loading in the first few days, and particularly in the initial lift of craft and shipping. I believe as a result that our only major over-insurance was in the matter of anti-aircraft protection.

The early requirements of the anti-aircraft organization were worked out by an inter-Service committee which based its recommendations on the appreciation of the probable strength and capabilities of the German Air Force at the time of the invasion. There is no doubt that there could have been nothing more calculated to upset the establishment and working of our beach-heads than hostile enemy air activity against them, and on these grounds it is understandable if the appreciation of the enemy air reaction to the landing erred on the gloomy side. The fact remains that the artillery state in the early days showed that anti-aircraft guns represented an appreciable percentage of the total number of pieces ashore.

In general, events were to prove that the overall planning for the assault was sound and that in spite of the magnitude of the task and the shortage of time for its completion, no essential detail had been overlooked. The plan proved capable of implementation and workable in practice.

CHAPTER FIVE

Forging the Weapon

REFERENCE to the Order of Battle of 21 Army Group shows that the bulk of forces available for operation Overlord was lacking in battle experience. These formations had spent a long period energetically training in England, but inevitably some of their notions and doctrines had become theoretical. During the planning period, therefore, I set about the task of putting across to the troops under my command a sound battle technique. This process was facilitated by the fact that I had 7 Armoured, 50 and 51 Divisions and two Armoured Brigades who had had considerable service in the Eighth Army; by exchanging officers between these formations and those less experienced I endeavoured to spread our available experience as much as possible. I also held a conference of all General Officers in the Army Group as early as I could arrange it, to explain to them my views on the major points of battle technique. I moreover decided to make certain changes amongst the commanders of formations in England, again with the object of making good as far as possible the inevitable lack of battle experience I found so prevalent.

Time for these tasks was short, and I found it necessary to give firm guidance and quick decisions in order to ensure that the formations would be properly launched when the time came. In this I received every possible support from the War Office. The relationship between the War Office and 21 Army Group developed on the basis of complete understanding, confidence and team work and, in a letter of appreciation that I wrote to the War Office just prior to D-day, I thanked the staff there for its unfailing co-operation, and acknowledged that our efforts and successes would owe much to the teamwork existing between the two organizations.

The process of forging the weapon for the task which lay ahead occupied much of my time right up to D-day. I was determined to gain the confidence of the fighting troops, and to inspire them with confidence in themselves and in their ability to achieve the task which lay ahead of them. I aimed to build up their morale to the highest possible state so that they would sweep all before them in this great adventure. I travelled throughout England in order to visit each individual formation under my operational control—both British and American. In these essentially informal visits, I gave a talk to the officers and men on the subject of the

war and of the job we were undertaking, and in this way established a personal link between them and myself.

In preparing an army in the home country for a great operation, there are many important factors which go to build up its morale which differ from those affecting an army based overseas. Overlord was to be one of our greatest national military undertakings, and the essential background to the morale of the soldiers was public confidence in the Army, and in its ability to achieve results. It was a case of the whole nation becoming partner in the battle, and of the preparation of an inspired Army drawing strength from an inspired people. I did all I could to play my part in the 'Salute the Soldier' campaign and in other measures which were designed to achieve this high and vitally important degree of morale and sense of duty. At the invitation of the Ministry of Supply I also visited a number of factories to tell the workers on the home front about the Army, and to assist in the fostering of that spirit of a single team striving together with a single purpose.

The British troops and their Canadian and American colleagues went into this battle inspired to the highest purpose, confident of the wholehearted backing of their homelands and possessed of a tremendous morale.

In a final tour of the formations I spoke to all officers down to and including the rank of Lieutenant-Colonel. In these talks I emphasized again the major points of battle doctrine, and reviewed the latest Intelligence on the enemy situation. I took the opportunity to wish the senior officers Godspeed in the great task we were about to undertake.

As had become my normal practice, I held an exercise attended by all the General Officers of the First and Third United States, First Canadian and Second British Armies, in order to recapitulate to them my plan of operations, to hear from them an outline of formation planning, and to study with them certain hypothetical situations which might arise once the operation had begun. This exercise was held in London on 7 and 8 April and was extremely valuable. The conference was attended by the British Chiefs of Staff; the Prime Minister also visited it and gave a short talk on the importance to all the Allies of the successful outcome of the forthcoming operation.

In these various ways what I term 'forging the weapon' was accomplished, and as D-day drew nearer I had no qualms or doubts about the successful showing that this mighty force would make on the Normandy beaches.

CHAPTER SIX

The Mounting of Operation Overlord

THE mounting of an amphibious operation may be defined as the process of concentrating the troops taking part into suitable areas, from which they move to marshalling areas, whence in turn they are called forward to the points of embarkation. The process is one of great complexity, particularly when concerning an operation of the magnitude of Overlord, in which over 20,000 vehicles and 176,000 personnel were to be landed on the far shore in the first two days. Formations and units had to be concentrated with relation to their appropriate marshalling areas and embarkation points, which extended from Felixstowe to Plymouth and South Wales; during the mounting, the final stages of waterproofing vehicles and equipment had to be completed to enable them to disembark from landing craft and wade ashore; the assault troops had to be packed up for the operation, and therefore during the last stages 'hotel' servicing had to be arranged for them by other units, which, in many cases, themselves had subsequently to prepare for embarkation; 'residues', in other words the portions of units which were not necessary in the initial phase, had to be separated from their parent formations and subsequently despatched overseas to rejoin them; marshalling areas and embarkation points had to be laid out in great detail, often in very confined areas; a highly complicated security system had to be organized and implemented to prevent leakage of information, and in particular to ensure that once the troops had been briefed about the role they were to play, they would be denied contact with the outside world. Special map depots had to be established near the marshalling areas so that maps could be issued at the last possible moment; an immense number of other details had to be worked out including such matters as issuing French currency without prejudice to security, and the sealing of NAAFI and welfare personnel working among troops who had been briefed as to their destination. Other measures of security were the suspension of certain diplomatic privileges to foreign nationals during the last days before the operation, and the establishment, well in advance of D-day, of a visitors ban for civilians throughout the coastal belt of southern England.

The main basis of the mounting plan was the distribution of the naval forces in the various sectors of our southern coast. The three British naval assault forces were distributed respectively at

Felixstowe and Tilbury, at Shoreham, Newhaven and Portsmouth, and at Portsmouth and Southampton. United States forces embarked at Weymouth and Portland, at Torquay, Brixham and Dartmouth, and at Plymouth. Follow-up forces which were loaded prior to D-day sailed from the Thames and Plymouth, and other United States forces loaded in South Wales. In order to position the invasion forces in appropriate areas, the plan of 'shuffling round' in the available accommodation involved moves of troops throughout the United Kingdom.

Great credit is due to the War Office and ETOUSA staffs, and to the Movement Staffs, British railways and transport organizations who together achieved successfully this enormous feat of organization.

An additional complication to the mounting plan arose from the possibility of postponement. Many of the troops had to be loaded before D-day in very cramped conditions, and the decision whether the operation would start, or be postponed by reason of adverse weather, had obviously to be left to the last possible moment. The procedure for postponement therefore involved in some cases disembarkation of troops; in the event of such disembarkation, arrangements had to be made for temporary accommodation and feeding, for which special camps had to be set up in some sectors. In the event a postponement was made, proving it to have been fortunate indeed that detailed plans for the eventuality had been perfected.

A short period before D-day an exercise called 'Fabi'us' was held to test the embarkation machinery. The scope of the exercise included moving and embarking many thousands of troops, and as far as possible the complete organization was put to the test. This exercise proved of the greatest value, as it provided invaluable lessons and experience for the actual operation.

About a month before D-day the various higher headquarters of the invasion forces moved to their operational stations. Considerable thought was given to deciding the various locations, the main factor being the provision of adequate communications. It was unfortunate but inevitable that, because of the communications system, the Air Force had to be split off from the Navy and Army Group Headquarters, and took up its location in the Stanmore—Uxbridge area, while Admiral Ramsay and myself set up with our staffs just outside Portsmouth. Portsmouth was the nerve centre of communications to the embarkation areas, and from my point of view was well placed as a jumping off point for my own Tactical Headquarters which I intended to take over to Normandy as early as events permitted.

At Portsmouth, together with Admiral Ramsay, I was to be

in close touch with the headquarters ships of the assaulting formations, and it was therefore obviously the best place for me to be at H-hour. From the Air Forces point of view the centre of communication for all Air Force formations and airfields was at Uxbridge and, since there was no satisfactory alternative, the Air Forces Headquarters were located there. The Supreme Commander moved an echelon of his headquarters near us outside Portsmouth.

CHAPTER SEVEN

The Battle of Normandy: I. The Assault

THE DECISION TO LAUNCH THE OPERATION

ON the morning of 4 June 1944 General Eisenhower and his subordinate commanders met to consider the meteorological forecast for 5 June.

The forecast was so unpropitious that the Supreme Commander ordered a postponement of twenty-four hours. By the time this decision was made, part of the American assault force had already put out into the Channel, but so heavy were the seas that the craft were compelled to turn about and seek shelter. By the morning of 5 June conditions in the Channel showed little improvement, but the forecast for the following day carried a gleam of hope. An interval of fair conditions was anticipated, beginning late on 5 June and lasting until the next morning, with a drop in the wind and broken clouds not lower than 3000 feet. Towards evening on 6 June, however, a return to high winds and rough seas was predicted, and these conditions were then likely to continue for an indefinite period.

It has been shown that the latest possible date for the invasion in early June which gave the required tidal conditions was 7 June. But a second postponement of twenty-four hours was impracticable, for the naval bombardment forces had already sailed from their northern bases three days before and an additional day's steaming would have made it necessary to put back into port to refuel, thus upsetting the whole schedule of the operation. The Supreme Commander was therefore faced with the alternatives of taking the risks involved in an assault in the bad weather on 6 June, or of putting off the operation for four weeks, when the tide and moon conditions would again be favourable. Such a postponement would not only have been most harmful to the morale of the troops, but might well have prejudiced secrecy and the possibility of gaining tactical surprise. At 0400 hours on 5 June the decision was made: the invasion of France would take place on 6 June.

THE START OF THE GREAT ENTERPRISE

As they started out for the coast of Fortress Europe, my personal message was read out to all troops:

“... On the eve of this great adventure I send my best wishes to every soldier in the Allied team. To us is given the honour of striking a blow for freedom which will live in history; and in the better days that lie ahead men will speak with pride of our doings. We have a great and a righteous cause.

“Let us pray that ‘The Lord Mighty in Battle’ will go forth with our armies, and that His special providence will aid us in the struggle.

“I want every soldier to know that I have complete confidence in the successful outcome of the operations that we are now about to begin.

“With stout hearts, and with enthusiasm for the contest, let us go forward to victory. . . .”

With these words, the Allied assaulting divisions were launched into battle.

THE AIRBORNE LANDINGS

At 0200 hours 6 June, a ‘coup de main’ party of 6 Airborne Division was dropped near Benouville to seize the bridges over the Canal de Caen and the River Orne. Of the six gliders used, four landed with extreme accuracy. Surprise was complete, both bridges were captured intact and a close bridgehead was established. Half an hour later, 3 and 5 Parachute Brigades began to drop east of the Orne. The position at the bridges was reinforced and another of the original objectives—a coastal battery near Merville—was quickly assaulted and overrun. Later the task of blowing the bridges over the River Dives and its tributaries at Varaville, Bures and Troarn was successfully completed, though not before considerable opposition had been overcome.

On the whole, the drop of 6 Airborne Division was more scattered than had been planned, but one repercussion of this was that the enemy was misled about the area and extent of the landings. Enemy counter action began to develop at 0500 hours and strong attacks were delivered against the Orne bridgehead. These were effectively driven off and the division held all its gains in spite of increasing opposition: thus securing the left flank of the Allied beachheads.

101 United States Airborne Division began dropping south-east of Ste Mere Eglise at about 0130 hours. The division was dropped over a large area and had difficulty in assembling for action, but quickly seized the two villages of Pouppeville and St Martin-de-Varreville, behind the Utah beaches. 82 United States Airborne Division landed west of the Carentan-Cherbourg main road from 0230 hours onwards. The division was very

widely dispersed astride the River Merderet, but set about its tasks of seizing the town of Ste Mere Eglise and of protecting the inland flanks of 101 Airborne Division.

Cloud and atmospheric conditions had been largely responsible for the scattered nature of the landings, but the airborne divisions succeeded in their mission. They achieved surprise and caused great confusion by cutting enemy communications and disorganizing the German defence, and above all they succeeded in capturing the causeways across the inundated areas behind the Utah beaches.

While the airborne landings were in progress, over 1,100 aircraft of Bomber Command commenced the air offensive as planned. Nearly 6,000 tons of bombs had been dropped on the coast batteries by dawn.

THE SEA PASSAGE

Meanwhile, the Allied sea armada drew in towards the coast of France, preceded by its flotillas of minesweepers. The passage from the assembly area south of the Isle of Wight had, in the words of Admiral Ramsay's report, an 'air of unreality' owing to the complete absence of any form of enemy reaction. No U-boats were encountered, as the bad weather had drawn the enemy surface patrol craft into port; the German radar system was upset as a result of our air attacks and other counter measures, and no reconnaissance aircraft were observed. Not until the leading ships had reached their lowering positions, some seven to eleven miles offshore, and the naval bombardment squadrons had opened fire on the shore defences, was there any appreciable enemy activity.

During the sea passage heavy seas were running in the Channel, with waves as high as five or six feet, and the wind was strong and gusty; it was an outstanding feat on the part of the naval forces that in spite of this every main essential of the plan was carried out as intended.

The cloud conditions were not very favourable for bombing when over 1,300 heavy day bombers of the Eighth United States Air Force, and eight medium divisions of the Ninth United States Air Force, swept over the target area. Meanwhile the heavy ships of the naval bombardment squadrons opened on the coast defence batteries, while gradually the destroyers and the great number and variety of supporting craft successively came into action as the assault craft ran into the beaches and the troops stormed ashore. Despite the massive air and naval bombardment, the coastal defences in general were not as effectively destroyed as had been hoped, but the enemy opposition was effectively neutralized for the vital period of the assault; field works behind

the beaches were largely eliminated, wire entanglements were broken down and some of the minefields set off, and the defenders were thoroughly shaken by the weight of our fire. The enemy's communications network was paralysed and his radar system thrown into confusion, with the result that during the period of the landings the enemy High Command remained in ignorance of the true extent, strength and objectives of the assault.

The high seas and heavy surf created considerable difficulties in getting the troops ashore. In spite of the outstanding seamanship of the naval crews, landing craft were hurled on to the beaches by the waves and many of the smaller ones were swamped before touching down. The onshore wind had swept the tide up the beaches as much as half-an-hour ahead of schedule, and the under-water obstacles were thus awash sooner than had been anticipated. This made the work of the obstacle clearance parties largely ineffective, so that subsequent waves of assault craft suffered considerable casualties by fouling uncleared obstacles. Numbers of troops were swept off their feet in the water as they waded ashore, and as a result of sea sickness many were very exhausted on reaching dry land. It was moreover impossible on some beaches to 'swim in' the amphibious tanks, upon which we relied to give the infantry fire support in their task of clearing the beach exits.

But the assault was on; more and more troops stormed ashore; the Allies had set foot again in France, and this time they had come to stay.

THE ASSAULT BY FIRST UNITED STATES ARMY

On Utah beach, 4 Infantry Division led the assault of VII United States Corps, on a front of one regimental combat team. The landing was made approximately on time, though the assault waves touched down some thousand yards south of the planned position. The error in beach finding was due to the coastline being obscured by the haze of the air bombardment, but it turned out to be a fortunate error since the obstacles were fewer where the troops actually went ashore than in the sector originally planned. The progress of the assault was greatly assisted by thirty amphibious tanks, launched five thousand yards offshore, which arrived on the beach with the loss of one only. Casualties were not excessive, and movement ashore proceeded well; a second regimental combat team was soon disembarked, and a beachhead was secured on a four thousand yard front. During the day in some places the troops penetrated up to ten thousand yards, having crossed the inundated area behind the beaches and made contact successfully with 101 Airborne Division.

On Omaha beach, H-hour for the assault had been fixed 0645 hours. The plan of V United States Corps was to assault on a broad front with two regimental combat teams, one from each of 29 and 1 United States Divisions. The former was to capture initially Vierville-sur-Mer, while the latter was to secure Colleville-sur-Mer, some three miles to the east.

The leading wave touched the shore at 0634 hours, but the heavy seas and density of under-water obstacles caused considerable losses to amphibious tanks and landing craft. Owing to poor visibility the air bombing in this sector had been largely ineffective, and the naval guns were hampered by the configuration of the ground which made observation difficult. On Omaha beach the enemy coastal defence troops in the area had only recently been augmented by a German field formation (352 Infantry Division), which was holding a stand-to exercise on the coast and manning the defences as our assault began. The American troops therefore ran straight into an enemy division deployed for action. Deprived of the planned degree of support from amphibious tanks and naval craft, the attacking formations suffered severe casualties and were pinned to the beaches. The Ranger battalions who landed on the right flank of the assault also suffered heavy casualties and for some hours the position at Omaha hung in the balance. With extreme gallantry, however, the American infantry regrouped, and supported by follow-up regimental combat teams, stormed the enemy positions and succeeded in gaining a foothold. By nightfall V United States Corps had secured a beachhead about a mile in depth on the line Vierville-Colleville, and some forward elements were already pushing towards the high ground near Formigny, some two miles inland.

THE ASSAULT BY SECOND BRITISH ARMY

Second British Army assaulted on the right in the Gold sector with 50 Division of 30 Corps. In the centre sector, designated Juno, was 3 Canadian Division, and on the left 3 British Division (Sword sector): both of which were under 1 Corps.

50 Division assault was made on a two brigade front. The intention for D-day was to penetrate the beach defences between Le Hamel and La Riviere and to secure a covering position which would include the town of Bayeux and the high ground in the area of St Leger, astride the main road from Bayeux to Caen. The division had under command 8 Armoured Brigade, of which two regiments were amphibious, assault teams of 79 Armoured Division, and a Royal Marine Commando: which was to land immediately behind the leading right hand brigade and move west along the coast to seize Port-en-Bessin.

As on Omaha beach, the weather was extremely unfavourable; the sky was overcast and visibility only moderate, while a Force 5 wind raised a considerable sea in the anchorage and it was considered too rough to launch the amphibious tanks. The landing craft carrying the tanks were therefore ordered to beach behind the assault craft of the leading infantry, which touched down within a few minutes of H-hour—which was 0725 hours. On the right, the main opposition came from Le Hamel, which had escaped reduction by the initial air and sea bombardment. Here the infantry were pinned to the beach for some time by machine gun and mortar fire, but the opposition was gradually by-passed and the troops started to push inland. On the left, the task of the assaulting infantry was somewhat easier, for the bombardment of La Riviere had been more effective and the enemy resistance was conducted with less spirit. The leading brigade moved quickly inland to its objective on the Bayeux-Caen road. Eventually the situation at Le Hamel was cleared up; meanwhile reserve brigades were landed successfully and by last light the forward positions of 50 Division were roughly on the line Manvieux-St Sulpice-Vaux-Brecy-Creully. At Creully contact was made with patrols of 3 Canadian Division, but touch had not been gained with V United States Corps on the right; the Royal Marine Commando had experienced difficulty during its landing and got delayed, so that by nightfall it was about one and a half miles south of the objective Porten-Bessin.

Although not all the D-day objectives had been secured, the situation in the 50 Division sector was satisfactory and an advance inland had been made of some five miles.

In 1 Corps sector, 3 Canadian Division assaulted with two brigades, and 3 British Division on a frontage of one brigade. The initial task of these formations was to secure a covering position on the general line Putot-en-Bessin-Caen-River Orne to the sea, joining up with 6 Airborne Division on the left. With 3 Canadian Division there was 2 Canadian Armoured Brigade (including one amphibious regiment), while 27 Armoured Brigade (with two amphibious regiments) was under command 3 British Division; both formations were supported by appropriate detachments from 79 Armoured Division.

The two leading Canadian brigades assaulted astride Courseulles-sur-Mer about 0800 hours. The rough sea caused casualties to the amphibious tanks and delay to some of the assault craft, and the fact that the landing was behind schedule (H-hour was 0735-0745 hours) proved a great handicap to the engineers who had less time than planned to deal with the under-water obstacles before the incoming tide covered them. The enemy resistance was stiff, as a number of strong points had survived the preliminary bombard-

ments and it was some time therefore before the beach exits could be cleared. Once clear of the beaches steady progress was made; because the advance was more rapid on the left of the sector, the reserve brigade was brought in on that flank, and throughout the day the Canadians pushed forward steadily; by nightfall they were on the general line Lantheuil-Le Fresne-Camilly-Villons-les-Buissons. Tanks of 2 Canadian Armoured Brigade had given great assistance to the advance, and two troops had, in fact, succeeded in reaching one of the final objectives for the day—Bretteville L'Orgueilleuse, on the Bayeux-Caen road; there they inflicted considerable casualties on the enemy before withdrawing for the night to the main divisional line.

The task of 3 British Division was to assault the beaches just east of Lion-sur-Mer and advance on Caen to secure a bridgehead there over the River Orne. The leading brigade was to secure a firm base on the Periers-sur-le-Dan feature, through which the following brigades were to advance on Caen. The division was to link up with 6 Airborne Division on the bridges over the canal and river at Benouville. The plan provided for troops of 4 Commando Brigade clearing up the area between 3 Canadian and 3 British Divisions. 1 Commando Brigade was made responsible for capturing enemy posts on the left flank of the Corps sector and the port of Ouistreham; this brigade was subsequently to join 6 Airborne Division east of the Orne, and continue clearing up enemy posts on the coast up to and including Cabourg.

H-hour for 3 British Division was fixed for 0725 hours and the assault waves reached the beaches well on time. A fairly heavy sea was running, but two squadrons of amphibious tanks were launched about 4500 yards from the shore and about half of them were able to reach the beaches abreast of the leading infantry. In general, the assault in this sector went according to plan and the leading brigade was soon a mile inland attacking Hermanville, Colleville, and battery positions on the southern outskirts of Ouistreham. The follow-up brigade came ashore shortly after 1000 hours, by which time heavy fire was coming down on the beaches and their exits: but the brigade reached its assembly positions near Hermanville quickly and pushed on southwards, meeting considerable opposition from infantry and strong points protected by concrete and minefields. The reserve brigade of 3 British Division landed soon after midday; it was moved to the left of the divisional area owing to the heavy opposition which had been encountered at Douvres-la-Delivrande.

By late afternoon Bieville had been secured, and an enemy counter attack by infantry and some twenty tanks of 21 Panzer Division was broken up with the assistance of our own armour. By nightfall, the division was well established with forward elements

on the line Bieville-Benouville, where contact was made with 6 Airborne Division. Ouistreham had almost been cleared, but the Commandos had not succeeded in capturing the heavily fortified strong point at Douvres.

East of the River Orne, 6 Airborne Division withstood a number of counter attacks during the day; in spite of heavy casualties the airborne troops succeeded in frustrating repeated attempts by enemy infantry and tanks to capture Ranville and to wipe out the Benouville bridgehead. The division was joined during the afternoon by Commandos of 1 Brigade, but attempts to expand the bridgehead northwards towards the coast were held on the line Breville-Sallenelles. At 2100 hours the gliders of 6 Air Landing Brigade arrived and served to strengthen our positions on the left flank.

REVIEW OF THE SITUATION AT THE END OF D-DAY

As a result of our D-day operations we had gained a foothold on the Continent of Europe.

We had achieved surprise, the troops had fought magnificently, and our losses had been much lower than had ever seemed possible. We had breached the Atlantic Wall along the whole Neptune frontage, and all assaulting divisions were ashore. In spite of the bad weather the sea passage across the Channel had been successfully accomplished, and following this the Allied Naval Forces had given valuable support by fire from warships and craft; the Allied Air Forces had laid the foundation of success by winning the air battle before the invasion was launched, and by applying their whole collective striking power, with magnificent results, to assist the landings.

In spite of the enemy's intentions to defeat us on the beaches, we found no surprises awaiting us in Normandy. Our measures designed to overcome the defences proved successful. But not all the D-day objectives had been achieved and, in particular, the situation on Omaha beach was far from secure; in fact we had only hung on there as a result of the dogged fighting of the American infantry and its associated naval forces. Gaps remained between Second British Army and V United States Corps and also between V and VII United States Corps; in all the beachhead areas pockets of enemy resistance remained and a very considerable amount of mopping-up remained to be done. In particular, a strong and dangerous enemy salient remained with its apex at Douvres.

It was early to appreciate the exact shape of the German reaction to our landings. The only armoured intervention on D-day was by 21 Panzer Division astride the Orne, north of Caen. Air reconnaissance, however, showed that columns of 12 SS

Division, quartered in the area Lisieux-Laigle-Bernay, were moving west.

To sum up, the results of D-day were extremely encouraging, although the weather remained a great anxiety. I ordered the armies to proceed with the plan; First United States Army was to complete the capture of its D-day objectives, secure Carentan and Isigny so as to link up its beachheads, and then to thrust across the base of the peninsula to isolate Cherbourg as a prelude to its reduction. Second British Army was to continue the battle for Caen, develop the bridgehead southwards across the Bayeux-Caen road and link up with V United States Corps at Port-en-Bessin.

CHAPTER EIGHT

The Battle of Normandy:

2. The Establishment of the Initial Bridgehead and the Capture of Cherbourg

THE INITIAL PROBLEMS

It was clear to me that we should now have to deal with three immediate problems, the solution of which was vital in order to start the campaign on a proper footing.

First it was necessary to join the individual beachheads into one continuous bridgehead. This was a task of considerable magnitude since the two Armies had assaulted on a front of about fifty miles, and in particular the American assaults were separated by the deep Carentan estuary and the system of water lines and floods associated with it. The second essential was to retain the initiative during the early stage when we were concentrating on forming a secure bridgehead; we had started with the initiative and we had to retain it in order that the battle should be swung our way. The third problem was to guard against any setback or reverse. During the initial days the Allied forces were relatively thin on the ground and time was necessary to get the whole organization sorted out and working smoothly; while this was happening there was a danger of the enemy catching us off balance. A reverse would have had very serious repercussions, not only in Normandy but also throughout the world, and it was therefore important to avoid any setback.

It was apparent on 7 June that the solution of these immediate problems was going to be complicated by the situation in the Omaha beachhead and also by the tenacity of the German defenders in a number of strong points which had been by-passed during the first day's operations. These difficulties were, however, overcome; V United States Corps fought with outstanding gallantry and retrieved the situation, while the mopping up of enemy centres of resistance inside the beachheads was eventually accomplished: although the process took some time, during which the rear areas abounded in snipers and small enemy parties which considerably hindered circulation.

FIRST PHASE: LINKING UP THE BEACHHEADS

7-12 June

On the American sectors the situation demanded the firm establishment of the Omaha beachhead, and the rapid development of operations to capture Isigny and Carentan in order to provide a proper link between V and VII United States Corps; meanwhile VII Corps required to reorganize its front with the airborne divisions and set about the task of securing Cherbourg. The gap had to be closed between Omaha and Gold areas, as Port-en-Bessin was still in enemy hands; at the same time Second British Army had to develop its operations with all possible speed for the capture of Caen. On the 30 Corps front the object was to develop a thrust southwards on Tilly-sur-Seulles and Villers Bocage, in order to establish armour on commanding ground well inland, thus facilitating the development of the bridgehead.

At first light on 7 June the Omaha beaches were still under close fire from enemy weapons of all calibres, but the American troops fought sturdily and gradually extended their initial holding. Any attempt to move westwards from the bridgehead met severe enemy reaction, but progress was slowly made to the south. Patrols eastwards along the coast made contact with British troops, who captured Port-en-Bessin. On the following day advances were more substantial and the opposition on the west flank was overcome, so that by 9 June, having by-passed Grandcamp, American troops captured Isigny with a bridge over the River Vire about one mile to the south-west. Farther east, crossings were effected over the River Aure and Colombieres was reached. 2 United States Division came into action in the centre of the Corps bridgehead and by-passed Trevieres, reaching Rubercy on 9 June. Meanwhile, on the left of the beachhead 1 United States Division made good progress and linked up with 50 British Division just west of Bayeux on 8 June.

By 10 June V United States Corps, pushing on rapidly on a three divisional front, secured the Foret de Cerisy with practically no opposition, and pushed patrols into Balleroy. The enemy continued to make determined efforts to prevent the junction between V and VII United States Corps and the road between Isigny and Carentan was under heavy fire; by 10 June, however, patrols of 29 United States Division were in contact with 101 Airborne Division and two days later, when Carentan was finally captured, the beachheads had been securely linked. The enemy put up a fierce fight for Carentan and 101 Airborne Division was much hampered in the operation by the difficult nature of the flooded country. With the joining of V and VII United States

Corps, our bridgehead was made continuous throughout the invasion frontage.

Operations from Utah beach developed well on 7 and 8 June. 101 Airborne Division was relieved in order to concentrate on the capture of Carentan, and junction was effected with 82 Airborne Division in the Ste. Mere Eglise area. Thereafter, while 82 Airborne Division pushed westwards beyond the River Merderet, 4 United States Division was advancing north towards Montebourg, where heavy fighting took place on 10 June.

The operations for the capture of Caen were continued from the north by 3 British Division and from the north-west and west by 3 Canadian Division; but it quickly became apparent that the enemy was concerned for the security of this nodal point, and was quick to bring forward reserve formations to hold us off from the town and to prevent the expansion of our bridgehead south of the Caen-Bayeux road. On 7 June, 3 Canadian Division pressed forward and reached its objectives on the Bayeux-Caen road at Putot-en-Bessin and Bretteville L'Orgueilleuse, with forward troops south of the road at Norrey-en-Bessin, while farther east Authie was reached. The enemy resistance became increasingly severe and culminated in a major counter attack against Authie; after a heavy engagement the Canadians withdrew to Villons-les-Buissons to reorganize. At 2200 hours a further counter attack developed from Buron, but this was successfully beaten off. In these engagements the Canadians were faced by tanks of 21 Panzer Division and infantry from 12 SS Panzer Division, both of which suffered severe casualties. Over the next three days further enemy counter attacks developed, but the Canadians stood firm and on 11 June launched a further attack in the same area which became heavily engaged with enemy tanks and anti-tank guns.

Meanwhile 3 British Division was pressing attacks towards Caen from the north against strong opposition which included tanks. The enemy was well concealed and in strength, and his positions were covered by minefields and anti-tank ditches; although fighting was continuous our troops were not able to make any great headway in this sector.

While 1 Corps operations were developing round Caen, 30 Corps was engaged in heavy fighting in the Tilly-sur-Seulles sector. The intention was to thrust south through Tilly-sur-Seulles towards Villers Bocage, employing initially 8 Armoured Brigade, which was to be followed by 7 Armoured Division (then coming ashore). On the morning of 9 June, Le Haut d'Audrieu was seized and the advance continued towards the road triangle east of Tilly. In addition to 12 SS Panzer Division, tanks of Panzer Lehr Division were identified in this sector and although 7 Armoured Division came into action near Tilly on 10 June, progress was slow. On the

following day elements of 7 Armoured Division fought their way into Tilly, but were subsequently driven out by a very heavy counter attack.

On the morning of 12 June the 30 Corps advance had reached the general line La Belle Epine-Lingevres-Tilly-Fontenay-le-Pesnel-Cristot-Bronay. In these villages the enemy had established strong points with a co-ordinated system of anti-tank defences backed up by detachments of infantry and armour. It was therefore decided by Second Army to regroup and to launch 7 Armoured Division on a new thrust line, which would sweep down from the right flank of 50 Division and come in on Villers Bocage from the west; this drive would continue eastwards towards Evrecy and the high ground between the Rivers Odon and Orne. The attack, if successful, would threaten the enemy forces covering Caen on the north and north-west.

East of the River Orne our troops were concerned in maintaining the bridgehead in face of continuous counter attacks, and in developing operations towards the coastal sector and Cabourg.

1 Commando Brigade secured Franceville Plage, but efforts to capture Cabourg were held up by strong enemy defences. On 8, 9 and 10 June, 6 Airborne Division withstood persistent enemy attacks and took heavy toll of the enemy. Meanwhile 51 Division was arriving and concentrating in the Orne bridgehead in preparation for attacks which were to be developed towards the eastern outskirts of Caen. This move was to be complementary to 30 Corps thrust from the west.

THE ENEMY SITUATION IN THE OPENING PHASE

6-12 June

The enemy's detailed dispositions in the assault area were quickly clarified by our identifications: by 9 June the estimated number of prisoners taken was 6,000. It was soon evident that the West Normandy area had been, as we suspected, considerably reinforced during May. The sectors of the two original coastal divisions covering the immediate assault frontage had been shortened by the introduction of 352 Division in the Omaha area and by the move of 243 Division to the north-west. The Contentin peninsula had been strengthened by the arrival of 91 Division with a parachute regiment.

Although these identifications were no surprise, the location of 352 and 91 Divisions within the coastal 'crust' obviously made our initial tasks more formidable: and betrayed Rommel's influence in the siting of reserves.

When the battle began the principal enemy armoured and

motorized divisions in reserve in the west were disposed at intervals covering the coast from Antwerp to Avignon. Immediately available for action in Normandy were the following divisions: 21 Panzer (area Caen), 12 SS Panzer (area Evreux), Panzer Lehr (area Chartres). 17 SS Panzer Grenadier Division was south of the Loire, while the other formations were 116 Panzer (north of the Seine), 2 Panzer (area Amiens), 11 Panzer (area Bordeaux), 1 SS Panzer (Belgium), 2 SS Panzer (area Toulouse), and 9 Panzer (area Avignon). Our immediate attention was therefore directed to these ten divisions; but the enemy had also a number of field infantry divisions at ready call. These included 3 and 5 Parachute and 77 Divisions in Brittany, with 84 and 85 Divisions north of the Seine.

21 Panzer division was in action on D-day north of Caen, and main bodies of 12 SS, Panzer Lehr and 17 SS Panzer Grenadier divisions were identified on 7, 9 and 12 June respectively, the first west of Caen and the others south of Bayeux and astride the Aure. By 9 June, 1 SS Panzer was moving south and 2 SS Panzer, 2 Panzer and 11 Panzer divisions were all making preparations for a move or were actually en route. By 12 June, 3 Parachute and 77 Divisions had been identified on our front, bringing the total number of enemy divisions involved to twelve. It will be remembered that we had reckoned that we might have to face twenty enemy divisions by this date, including eight panzer. The 'missing' infantry was still, however, north-east of the Seine awaiting a landing in the Pas de Calais, while the 'missing' armour had been forced by air attacks to move on side roads and mainly by night. In the case of 2 Panzer Division, coming from Amiens, the approach march was so delayed that the division did not arrive till 13 June. These delays were a convincing revelation of the power of our Air Forces and of the selling power of our Cover Plan.

What was the reaction of the German High Command to the assault and the rapid penetration of the coastal defences?

We now know that the extent of the surprise we attained was more than could have been imagined possible. The disruption of enemy communications caused by our bombing, and the breakdown of his radar caused by our counter measures, left the enemy for a considerable time in doubt about the actual extent and strength of our assault. It was some considerable time before adequate information got back to Hitler, and even more before coherent orders were issued from higher headquarters to the fighting formations.

That 21 Panzer Division counter attacked, and 12 SS moved, on 6 June was due to their commanders' own initiative. Not only did the enemy appreciate that our landings in the Cotentin peninsula were intended merely as a diversionary effort, which

they could deal with easily, but the notion persisted that the whole operation was in itself a diversionary operation which was only the prelude to the main Allied invasion to be delivered in the Pas de Calais. As a result, the enemy completely misappreciated the scope of our landings and of our subsequent build-up, and this in turn was vitally to affect his decisions regarding calling divisions from northern France into Normandy.

The reaction of the German Supreme Command on receiving news of our landings is shown in a telephone conversation at 1655 hours on D-day between von Rundstedt's Chief of Staff and the Chief of Staff Seventh German Army. Hitler desired that the bridgehead should be annihilated by the evening of 6 June. This order, fantastic in retrospect, shows how little was known in Paris or Berlin of the magnitude of the Allied operation. Owing to bad communications, it is doubtful whether these orders were ever in fact passed on to the divisions concerned. The Chief of the German General Staff had apparently already said he thought the task impossible to carry out, but Rommel ordered that 21 Panzer Division should attack immediately.

Post-war interrogation of the German generals who were in Normandy shows the considerable confusion which existed in the enemy formations on D-day. A good example is 21 Panzer Division, the commander of which heard news of our approach just after midnight but received no orders of any kind from his superior headquarters until 0700 hours that morning. Although he had been ordered to make no move until the arrival of instructions from Army Group "B", on his own initiative he decided to attack the British 6 Airborne Division, and gave orders to this effect at 0630 hours. At 0700 hours he did not get any definite order as to the role his division was to play in resisting the invasion, and it was not until 1000 hours that an Operation Order arrived which cancelled his move against 6 Airborne Division and ordered him west to assist the forces covering Caen.

To add to the confusion caused by the breakdown of communications, it was apparent that the enemy plans for meeting our attack were vague and that, because of the differences between von Rundstedt and Rommel, no co-ordinated plan as to how to deal with a major onslaught in Normandy had been made. This fact, together with the manner in which the enemy reserve divisions were disposed and the delays caused by our bombing designed to impede the German concentration, led to the commitment piecemeal of the enemy formations as they arrived in the battle area. Our offensive policy, and our thrusts designed 'to peg out claims' inland, forced Rommel to adopt a policy of plugging the holes.

As we had planned, the enemy did not understand our local

intentions. Uncertain initially of our flanks owing to the size and success of our airborne landings, he became immediately apprehensive of a rapid exploitation towards the ports of Cherbourg and Rouen and of the possible design of striking towards the Pas de Calais to link with the main assault he was anticipating. His first reactions were attempts to block Caen and destroy our bridgehead on the right bank of the Orne; to oppose VII US Corps in strength at Montebourg (in order to protect Cherbourg); and to split the beachhead strip by contesting Carentan.

These three efforts were essentially defensive. His offensive efforts consisted of strong local attacks by the three panzer divisions—21, 12 SS and Lehr—all along the front between the Orne and the Seules. These attacks should have been co-ordinated, but owing to Allied air attacks, shortage of petrol, bad communications, and the inability of the infantry to hold its ground, they degenerated into a series of bitter local engagements. Very soon it was realized that it was beyond their strength alone to regain the beaches, and they settled down to the uncomfortable task of containing our beachhead while more panzer and infantry divisions were brought up.

The Situation, 12 June

The beachheads had now been firmly linked into a continuous bridgehead on a front of over fifty miles, varying in depth eight to twelve miles. With the arrival of 51 Division, the Orne bridgehead was more secure and additional bridging over the river and canal was put in hand.

We had firmly retained the initiative. The enemy was engaging his formations piecemeal in response to our thrusts. I appreciated that the vigour of his attacks to the west of Caen would be further strengthened as fresh reserves became available and felt that the plan for engaging his reserves on my eastern flank was beginning to take shape. Meanwhile it was likely that he would react further to the threat to Cherbourg; to do this he would endeavour to hold open a corridor on the west of the Cotentin and try to hold our thrust towards St Lo.

At this stage, in spite of the signs of movement already mentioned, no enemy formation had made the difficult journey from north of the Seine; a long detour was imposed by the wrecked bridges over the river and the bulk of the Fifteenth German Army waited grimly for an assault in the Pas de Calais.

The weather remained a great anxiety. Our build-up was already getting behind schedule; it reflects great credit on the Navy and the beach organizations that so much was accomplished in spite of the continually unfavourable weather conditions.

During the first six days 326,00 men, 54,000 vehicles and 104,000 tons of stores had been landed.

THE SLOW-DOWN IN OUR OPERATIONS

It was inevitable that after the successful outcome of the assault, the pace of operations slowed down. The assault formations needed time for a 'breather', while they reorganized and re-absorbed the echelons which had been left behind for the first days, but without which no unit could function for long. The beach organization had to be established and built up to its full efficiency. The whole administrative machine had to commence functioning on shore and initial shortages made up.

As mentioned, the build-up was falling behind schedule and this added to our difficulties.

In spite of these circumstances it was vital to retain the initiative, which could only be ensured by continuing the offensive. I therefore ordered a policy of limited offensive operations in furtherance of the plan, which were carried out although they often involved great risks. But the policy was successful mainly owing to the fine quality of the assaulting formations and the excellent support they were afforded by the Allied Air Forces. My immediate objects remained to capture Cherbourg and Caen, and to develop the central sector of the bridgehead to Caumont and Villers Bocage. Examination was made of the possibility of using airborne forces to hasten the capture of Caen, but conditions were found to be unsuitable for their employment.

SECOND PHASE:

THE INITIAL DEVELOPMENT OF THE BRIDGEHEAD

13-18 June

On the western flank, operations against Cherbourg continued with the cutting off of the Cotentin peninsula and the concentration of forces for the drive on Cherbourg, while farther east enemy attempts to regain Carentan were successfully resisted. In Second British Army the operations in the Tilly-sur-Seulles sector were maintained, still with the object of developing a southern pincer movement towards Caen by 30 Corps, while 1 Corps maintained steady pressure on the mounting enemy forces grouped round the town.

The enemy made urgent attempts to break the junction between Utah and Omaha sectors by counter attacking in the Carentan area, and committed 17 SS Panzer Grenadier Division for this purpose. On 13 June, 101 Airborne Division, assisted by tanks

from 2 United States Armoured Division, not only withstood the enemy onslaught but made some progress in the general direction of Periers, though the marshlands in the area greatly restricted manoeuvre. Further enemy counter attacks developed in this sector on 15 June. Meanwhile the fighting round Montebourg continued; the enemy was resisting strongly in this area, but the Americans gradually closed in on the town and also captured Quineville on 14 June. Enemy attempts to recapture Carentan and to block the main road to Cherbourg in the Montebourg area had left him weak in the centre, and the American forces were now well placed to cut off the peninsula. On 14 June 9 Infantry Division, assisted by 82 Airborne Division, drove west through St Sauveur-le-Vicomte directed to the sea coast about Barneville. St Sauveur fell on 16 June to the airborne troops, who then wheeled south to protect the left flank, while 9 Division continued the advance to the coast which was reached on 18 June.

A regrouping of the American divisions in the peninsula had meanwhile been taking place. On 15 June, VIII United States Corps became operational and took under command both airborne divisions and 90 Infantry Division. The Corps task was to face south and protect the rear of the forthcoming operations for the capture of Cherbourg. XIX Corps took the field on 14 June, with 2 Armoured and 30 Infantry Divisions together with 29 Infantry Division from V Corps. This Corps was to develop the bridgehead in the Carentan-Isigny area and to advance on St Lo round the east of the marshland area. On 15 June, La Compe was occupied and the advance continued towards the Canal de Vire. Attempts to make further ground west of the Vire were ineffective; all bridges over the canal had been blown and the enemy covering the waterway was located in strong defensive positions strengthened by mines. On the right bank of the Vire, however, 29 Infantry Division made progress, so that by 18 June First United States Army was disposed with VII United States Corps facing north with three divisions, while facing south, from Barneville on the west coast of the Cotentin to Caumont, were VIII, XIX and V United States Corps. The line ran north of both La Haye du Puits and St Lo, between which places the floods and marshes greatly handicapped our deployment.

30 Corps of Second British Army launched 7 Armoured Division in its new thrust towards Villers Bocage in the late afternoon of 12 June on the axis Subles-La Butte-La Paumerie-Amaye-sur-Seulles, roughly along the inter-army boundary. V United States Corps assisted by granting running rights over certain routes. 7 Armoured Division was to seize the high ground north-east of Villers Bocage by by-passing the town from the south, and was to be followed up by 50 Division. The advance in

the afternoon made good progress, and leading tanks reached Livry about three miles north-east of Caumont at 1745 hours, by which time main bodies were some three miles in rear. By dark the leading troops had completed the southwards thrust and were beginning to wheel to the east. The following morning the area of Villers Bocage was reached and the town entered, while patrols were pushed to the east and south. During this manoeuvre little opposition was encountered from Panzer Lehr Division, but on 13 June 2 Panzer Division, which was fresh from Amiens and had been ordered to the Caumont sector to stabilize the line in front of the Americans, arrived unexpectedly at Villers Bocage. Each side was surprised to find the other in the town; enemy counter attacks came in from the south-west and south-east and there was some heavy fighting at close quarters. At 1800 hours it was decided to withdraw from Villers Bocage to the high ground about two miles west of the town and this was successfully accomplished, after which further enemy counter attacks were broken up. Meanwhile 50 Division had started its advance south, but it met heavy opposition and little progress was made beyond the Balleroy-Tilly road.

On 14 June, 7 Armoured Division was holding a line from just west of Villers Bocage to the inter-army boundary near Caumont and was in touch with 1 United States Infantry Division. During the afternoon, a series of heavy enemy attacks developed, and as 50 Division was held up on the line La Belle Epine-Tilly-sur-Seulles, the exposed position of 7 Armoured Division became untenable. Orders were issued for a withdrawal of about five miles to the area of Parfouru-l'Ecluse, on the River Aure. In the evening two columns of enemy made further attacks and heavy fighting ensued in which great execution was caused by our artillery fire, including the support of guns of V United States Corps. The disengagement began at 2300 hours and was successfully completed during the night. Claims for the day's fighting were forty tanks knocked out, while very heavy losses were inflicted on the enemy infantry.

7 Armoured Division was now ordered to hold firm, while 49 Division (which landed on 13 June) and 50 Division were to press south and south-west to capture Hottot and Tilly. By 18 June this fighting had been going on for three days and was particularly violent round the town of Tilly, which was eventually captured on 19 June.

The north-eastern pincer movement on Caen did not make very much progress. 51 Division attacked St Honorine on 13 June, but, having taken the village, was unable to hold it in the face of subsequent enemy counter attacks. Thereafter any attempt to enlarge the Orne bridgehead met very determined enemy reaction.

In the centre of the British sector, 1 Corps was concerned in maintaining its positions in face of the steady and continuous pressure exerted by the German armour of 12 SS Panzer and 21 Panzer Divisions. As a result little progress was possible.

On 15 June, 8 Corps began to arrive on the Continent but, owing to delays in the build-up, the leading formation (11 Armoured Division) was two days behind schedule. This retarding of the build-up was to have unfortunate repercussions on the subsequent development of my plans.

By 18 June the enemy had deployed four armoured divisions between the Caumont area and Caen, while 17 SS Panzer Grenadier Division was committed in the Carentan sector. 2 Panzer Division, the latest armoured arrival, was committed astride our inter-army boundary. The three fresh infantry formations identified were all located on the west; 3 Parachute Division in the St Lo sector, and 77 with 353 Division in the Cotentin. It has been seen that the enemy continued to employ his reserves in Caen, and in the recapture of Carentin and the saving of Cherbourg. When we cut the Carentin peninsula the enemy was left with remnants of four different infantry divisions defending the fortress.

The Situation, 18 June

Although the enemy had managed to delay our progress towards Cherbourg, and to prevent us getting into Caen, he had been unable to release his Panzer divisions in order to regroup them for a properly mounted major counter attack. We had retained the initiative and were steadily pursuing our plan. We had so far achieved our object in drawing the bulk of the enemy armour on to the eastern flank, which was the first basic point upon which the design of operations was formed. The second factor was the development of our own build-up, and in this disappointments had to be faced: not only from the delay in taking the port of Cherbourg, but also owing to the adverse effect the weather was having on our beach working. To offset this, success in the third basic matter, that of delaying the enemy build-up, was achieved to a remarkable degree. The strategic bombing policy of the pre-D-day period was now yielding good dividends, and the growing paralysis over enemy communications was beginning to give us a tremendous advantage. The remorseless air offensive against enemy headquarters, communications and detrainning stations had caused disorganization which was aggravated by the activities of our SAS troops and the French Resistance. These facts are well illustrated by the following quotation from a report by von Rundstedt:

to provide the main movement from the west with the object of establishing itself, strong in armour, to the south-east of Caen in the area Bourguebus-Vimont-Bretteville-sur-Laize. It will be noticed that the intention to get a strong force into this area remained from now onwards the fundamental object of my strategy on the eastern flank: it was the key to ensuring the retention of the bulk of the enemy armour on the Second Army front. I had hoped to launch the offensive on 18 June, but at that time certain essential units and types of artillery ammunition were still waiting in the anchorage to be unloaded. I was forced to postpone the date of the operation to 22 June owing to the delays caused by unfavourable weather. My calculations were to be further upset by a gale of unprecedented violence which lasted from 19 to 22 June.

THIRD PHASE: THE CAPTURE OF CHERBOURG AND THE ESTABLISHMENT OF THE ODON BRIDGEHEAD

19-30 June

Following the isolation of Cherbourg, VII United States Corps continued operations northwards on a front of three divisions. On the right flank, 4 United States Infantry Division delivered a surprise attack on 19 June without artillery preparation and advanced to seize the high ground north-west of Montebourg. Prepared defences were encountered and the town held out until the evening; by nightfall the division was very close to Valognes. In the centre, 79 United States Division thrust towards the high ground north-west of Valognes and by night was astride the approaches to the town from the west, while 9 United States Division made a rapid advance, capturing Bricquebec by midday and reaching St Cristophe-du-Foc by the end of the day. On 20 and 21 June the Corps closed in on the defences of Cherbourg itself and began preparations for the final assault, which commenced in the afternoon of 22 June. The attack was preceded by heavy air action on the enemy positions, but although much damage was done to the defences, there were many points of resistance and the main progress was made on the flanks. On 23 June, the airfield about five miles east of Cherbourg was secured together with commanding ground on that flank and on the following day all three divisions reached the outskirts of the town. On 25 June, supported by naval gunfire, artillery and the air forces, troops broke into Cherbourg; two of the main forts were captured and the area of the arsenal was reached. The following day the dominating fortification, St Sauveur, was secured and the German garrison commander surrendered with the local Admiral. They were, however, unable to communicate with all the isolated groups of enemy

still offering resistance and sharp fighting continued at various points. On 27 June the garrison of the arsenal was persuaded to surrender with the aid of a sound truck operated by a Psychological Warfare unit, and during the next two days resistance ceased from the outlying forts in the harbour. Forces in the north-west corner of the peninsula had not been included in any of the surrenders and it was necessary for 9 Division to clear them out, a task which was finally accomplished on 1 July.

As a result of these operations the enemy lost some 39,000 prisoners, and VII United States Corps was now free to concentrate to the south in preparation for the next phase of operations. The port installations at Cherbourg had been very considerably wrecked by the enemy, and the anchorages and basins mined. The task of opening the port was energetically tackled by the Allied navies, but it was to be late August before Cherbourg was in a fit state to receive heavy lifts alongside berths.

To implement my instructions for the development of the pincer movement on Caen, Second Army regrouped in order to launch 30, 8 and 1 Corps into the operation. I was determined to develop this plan with the utmost intensity with the whole available weight of the British forces. I wanted Caen, but realized that in either event our thrusts would probably provoke increasing enemy resistance: which would fit in well with my plan of campaign.

Second Army plan provided for the start of the main thrust to be in the 30 Corps sector; the intention was to hold firm on the right and central sectors of the Corps front, and on the left to advance and secure the area of Noyers. This movement would protect the right flank of 8 Corps and was to be exploited towards Aunay-sur-Odon. 8 Corps was to be launched through the front of 3 Canadian Division, with a view to forcing crossings over the Rivers Odon and Orne and gaining a position on the high ground north-east of Bretteville-sur-Laize, dominating the exits from Caen to the south. The operation was planned in two phases, the first culminating with the seizure of the Orne crossings. 8 Corps had two infantry divisions and two armoured divisions, with two additional armoured brigades available for the task. In the 1 Corps sector, the intention was to ensure the security of the bridgehead, and prepare to eliminate the enemy salient north of Caen and clear the city, as the 8 Corps thrust took shape.

I have already mentioned that my orders provided for the main effort of Second Army to be launched on 22 June, but the continued bad weather made it impossible to adhere to this date. I have also referred to the gale which raged between 19 and 22 June; by 20 June we were already five days behind in our planned build-up, and I had to inform the Supreme Commander that owing to the late arrival of 8 Corps formations the earliest date on which

I could deliver its attack was 25 June: and then only provided the weather improved. Eventually 30 Corps attack was fixed for 25 June, with the 8 Corps thrust commencing twenty-four hours later.

On 23 June, 1 Corps carried out a preliminary operation in the Orne bridgehead as a result of which 51 Division captured St Honorine. This provoked a fierce counter attack by 21 Panzer Division which was driven off.

30 Corps started its thrust on 25 June with the object of occupying a commanding feature in the Rauray area. The attack by 49 Division with 8 Armoured Brigade under command began in darkness and thick mist at 0415 hours. During the morning steady progress was made on the right, and by the afternoon the high ground at Tessel Bretteville was reached and patrols pushed through the wood to the south. Meanwhile on the left considerable opposition was encountered in Fontenay and progress was halted. At 2100 hours a fresh attack with tank support was successful and Fontenay was in our hands by midnight in spite of the opposition. During the day we had been opposed mainly by 12 SS Panzer and Panzer Lehr Divisions. On the morning of 26 June the attack on Rauray was resumed from the high ground at Tessel Bretteville, but progress was soon brought to a halt by fierce resistance and the fact that the country was unsuitable for tanks; the armour, therefore, disengaged and was switched to resume the attack from the left flank. During the night 8 Armoured Brigade reached the outskirts of Rauray with infantry in close support. Heavy fighting continued throughout the following day, and the enemy mounted several tank attacks from the south and south-west; but our positions held, and on 28 June Bretteville was captured, but subsequently lost again in the face of a counter attack by 2 SS Panzer Division.

Meanwhile the 8 Corps attack was launched at 0730 hours on 26 June with 15 Division leading. The enemy was well concealed in difficult country, and extensive minefields covered his positions. The weather was bad with heavy rain and low cloud, but progress was made during the day in spite of heavy fighting, particularly around Cheux. By the end of the day leading troops were well south of the village with patrols in Grainville-sur-Odon and with a battalion established in Colleville; elements of 11 Armoured Division were in Mouen.

During 27 June operations continued in order to square up to the River Odon, pass 11 Armoured Division through to the high ground in the Evrecy-Esquay area, and subsequently to secure a bridgehead across the Orne. During the morning there was confused fighting, the main core of enemy resistance being in the Grainville area. This was gradually by-passed and by late

afternoon infantry were across the Odon. A little later a bridge was secured intact about one mile west of Baron and tanks were able to join the infantry on the east bank of the river.

The intention now was to widen the corridor down to the river by eliminating the enemy in the Grainville area, and to widen the Odon bridgehead by establishing additional crossings further south on the Evrecy road.

Early on the morning of 28 June the bulk of 11 Armoured Division was across the river moving towards Esquay and the dominating feature called Point 112, both of which the enemy was holding with Panzer detachments and anti-tank guns. By mid-afternoon our tanks were in the area of Point 112 and were working round to the north-east of Evrecy, but the enemy fought stubbornly and at the end of the day our armour was withdrawn into the bridgehead from its isolated positions on the high ground. Meanwhile a series of separate attacks was launched to mop up resistance on the flanks of the Corps axis, in addition to which a second bridgehead was secured across the Odon in the area of Gavrus.

On 29 June operations continued to enlarge the Odon bridgehead and finally to stabilize the corridor as a prelude to launching 11 Armoured Division to the River Orne. In the corridor, progress was made by 15 Division across the railway near Grainville and, farther south, towards the main Noyers-Caen road. On its left, 43 Division was dealing with determined opposition in the woods and orchards about the Odon and by evening had one brigade east of the river. At this stage in the operation the enemy made a determined effort to restore the situation. He put in a strong counter attack from the south-west, with one thrust astride the River Odon and the other astride the Noyers-Caen road; enemy detachments also infiltrated towards Cheux. Heavy fighting went on along the whole right flank of the Corps salient and the southern bridge at Gavrus was lost. By evening the situation had gradually improved and the enemy was driven off after having sustained heavy casualties.

During the day both 1 and 2 SS Panzer Divisions were encountered, and 9 SS Panzer Division with reconnaissance elements of 10 SS Panzer Division, both from the Eastern Front, also made their appearance. There were now elements of no fewer than eight Panzer divisions on the twenty mile stretch of the Second Army front between Caumont and Caen. In view of this it was decided that 8 Corps should concentrate for the time being on holding the ground won, and regrouping started with the object of withdrawing our armour into reserve ready for renewed thrusts.

In 1 Corps sector the divisions continued offensive activity and some local gains were made, but there was no major progress,

since the 8 Corps operation had not progressed sufficiently far to threaten the enemy defenders north of Caen, who continued to fight stubbornly.

The Situation, 30 June

The enemy had committed 21 Panzer, 12 SS and Panzer Lehr Divisions to a series of desperate but unco-ordinated attacks to regain the beaches, and these had failed.

The next step was obviously to try and seal off the beachhead until a really strong armoured force could be concentrated for a decisive attack. Owing, however, to the delays imposed by air attack and sabotage, this concentration of the armour in Normandy took over a fortnight to achieve. In the period 13-30 June five more panzer divisions—2 Panzer, 1 SS, 2 SS, 9 SS and 10 SS—joined those already involved.

Late as they were, their combined effort would have been very formidable had they been launched in a properly organized attack. As it was, their concentration was never achieved because it was forestalled by our own series of heavy attacks in the Odon sector from 25 June onwards. The enemy had no option but to resist with everything available, and one by one the Panzer divisions were flung in.

The presence of seven Panzer divisions (with elements of an eighth)—two-thirds of the enemy armour in France—along a 20 mile front gives some idea of the heavy fighting which took place there in the last week of June, and of the importance which the enemy attached to preventing the isolation of Caen.

'Crust' and 'cushion' had failed already, and the pledging of the Panzer divisions in a defensive role signified the failure of the 'hammer': and with it all hopes of ever driving the Allies out of France.

The equipment and supply arrangements of the enemy Panzer divisions are of interest. Most of them joined battle with very nearly their full establishment of armoured fighting vehicles (about 160 Mark IV and Mark V tanks and self-propelled guns), but the enemy was never able at any given moment to employ more than a small proportion of them in a mobile role. The dense bocage alone was not responsible for this. It was due mainly to the serious shortage of petrol, and also to a reduced rate of tank serviceability resulting from Allied artillery and fighter-bomber harassing missions over the forward areas. This interfered with tank maintenance, and generally necessitated the siting of workshops very far back from their Panzer regiments.

Another of the enemy's serious deficiencies, particularly from the defensive aspect, was his shortage of artillery ammunition.

He had large numbers of guns, but through maldistributed dumps and irregular supply they fired remarkably little.

The situation in the German Fifteenth Army area remained obscure; but apparently no infantry from the Pas de Calais area had yet been moved south, and it thus appeared that the enemy was still anticipating landings in the Pas de Calais. Meanwhile, of the twelve Panzer divisions in western Europe, eight were now in Normandy (and the remainder were apparently not yet battle-worthy), yet the enemy had failed to deliver a single major co-ordinated counter stroke against us.

As the story of the moves of the latest arrivals in Normandy was pieced together, the effectiveness of Allied air action in reducing the enemy's mobility became increasingly apparent. 9 and 10 SS Panzer Divisions took as long to travel from eastern France to Normandy as from Poland (where they had been refitting) to the French frontier. The wrecking of all the Seine bridges below Paris, together with the principal crossings of the Loire, had virtually isolated Normandy except for the routes which led into it through the Paris-Orleans gap. There the roads and railways inevitably became congested and afforded rich opportunities for sabotage and bombing. The enemy's difficulties were immeasurably increased by his shortage of fuel. We know that during the first six months of 1944 German oil production was reduced by at least forty per cent as a result of the bombing of plants by the strategic air forces; moreover, his supply columns were subjected to constant attack in their movements towards the front, and the outcome began early to be apparent in Normandy. Units were even moved on seized bicycles, with much of their impedimenta on horse transport, while heavy equipment had to follow as best it could by rail, invariably arriving some time after the men.

We had continued to retain the initiative, forcing the enemy to react to our thrusts; this had been accomplished by sustained offensive action; it had cost us considerable casualties and the Allied divisions had been kept going without respite and were inevitably tired. It was fortunate indeed that, in spite of the delays caused to our build-up by the weather, and above all by the gale of 19-22 June, it had been possible to mount the Second Army offensive by 25 June. Any further delays that had been forced upon us would have given Rommel some opportunity to form up properly his four SS Panzer divisions, and our problems might thereby have been greatly increased.

It is interesting to speculate upon the effect on our operations that really fine weather might have had in these early weeks. In fairer conditions the build-up of formations and stores might have been kept to schedule; with greater weight and increased resources the American operations could have proceeded more

rapidly, and 8 Corps operations might have succeeded in taking Caen before the flower of the SS Panzer formations had become available in its defence. In the first five days on the American sectors only thirty-eight per cent of the planned tonnage of stores was actually discharged, and after a fortnight the figure was still only seventy per cent. At the time of the storm, no further bad weather reserves of ammunition were available to the United States forces, who faced an extremely critical situation and had to cut expenditure to an emergency minimum. In the British sector, during the period of the storm, the effects on our intake were equally severe.

In the overall sense, however, we had been very successful in developing the plan. Cherbourg had fallen and First United States Army was now ready to proceed with its reorganization and regrouping, while the bulk of the enemy armour was concentrated in a formidable array on our eastern flank, where it was receiving a heavy punishment. Dietrich, Commander of 1 SS Panzer Corps in Normandy, has recorded that by 20 June the average company fighting strength of Lehr, 12 SS and 21 Panzer Divisions was down to about 25-35. At the end of the month we know that Panzer Lehr averaged 9-10 fighting men per company, in spite of having received 1800 reinforcements since D-day. These figures give some indication of the heavy fighting which went on in June.

Our tactics remained unchanged, and were based on retention of the initiative, the avoidance of setbacks, and the relentless pursuit of the plan to break out from the west.

On 30 June my orders to First United States Army emphasized the need for speed in starting the drive to the south, to take advantage of the existing enemy dispositions to stage the break-out quickly; I hoped at that time to commence operations on 3 July, and that it would be possible to strike straight through, without pause, to the line Caumont-Vire-Mortain-Fogeres. Subsequently operations would continue with minimum delays, to successive objectives in the areas Laval-Mayenne and Le Mans-Alencon. A subsidiary thrust was to be launched into the Brittany peninsula directed initially on Rennes and St. Malo.

My plan at this stage for developing the break-out operation remained to pin and fight the maximum enemy strength between Villers Bocage and Caen, while the main American thrust swung south and then east to the Le Mans-Alencon area and beyond. In this way I intended to cut the line of withdrawal from Normandy through the Paris-Orleans gap, and so force the Germans back against the Seine below Paris; this would have placed the enemy in a difficult situation as there were no bridges left intact over the river between Paris and the sea.

It was essential to the success of the plan that, once the American break-out operation began, it should be carried through without pause; the momentum had to be maintained, and all our resources had to be directed to ensuring this.

Second Army meanwhile was ordered to continue operations for the capture of Caen, and to maintain maximum pressure in order to hold the enemy forces. At the same time it was to ensure that our east flank positions remained firm. The enemy had now very great strength in the Caen sector and might well be contemplating a co-ordinated counter attack in strength; it was vital to the overall plan that Second Army should not suffer any reverse which might unbalance us.

CHAPTER NINE

The Battle of Normandy:

3. The Break-out. The Battle of the Mortain-Falaise Pocket, and the Advance to the River Seine

THE battlefield in Normandy was now assuming the layout desired for launching the break-out from the western flank. I had hopes of starting the operation on 3 July, but events proved this to be optimistic, and in fact it was not launched until 25 July.

The overriding factor was speed, in order to take advantage of the general enemy situation in Normandy and to achieve our designs before greater enemy strength was brought against us from other areas. This fact was patently obvious, yet there was no way of avoiding a series of delays which were imposed upon us. The basic difficulty was that before General Bradley could launch his break-out operation in strength, he had to undertake difficult and laborious preliminary operations to secure a suitable starting position. The extent of the flooded marshy country associated with the Carentan estuary made it necessary to go as far south as the general line of the Periers-St Lo Road before an area could be found adequate for the deployment of major assault forces. The degree of enemy resistance in such ideally defensive terrain greatly hampered progress; to the difficulties of bocage and marshland was added the handicap of persistently inclement weather, which restricted air support.

Delays on the western flank had, of course, direct repercussions on operations in Second Army. The pressure had to be maintained at full intensity in order to retain the enemy in the east, and with this object attacks were staged south-west, south and south-east of Caen.

FIRST PHASE: THE PRELIMINARY OPERATIONS,
SECURING THE AMERICAN START LINE
AND EXTENDING THE BRITISH BRIDGEHEAD
BEYOND CAEN

American Operations 1-9 July

While VII United States Corps was completing the capture of Cherbourg during the last week of June, the rest of the American Army was building up and regrouping. This process was delayed

by the retarded schedule of the build-up, and in particular by the effects of the storm in the second half of June. The attack southwards started on 3 July with a thrust by VIII United States Corps employing 82 Airborne, 79 and 90 Divisions. The object was to converge on La Haye du Puits, and on the first day 82 Airborne Division secured Hill 131 about two miles north of the town. Further progress was made on the following day, but the enemy exerted stubborn resistance and launched a series of counter attacks which considerably delayed the advance, and it was not until the late afternoon of 8 July that 79 Division secured the objective. The enemy had rushed 353 Infantry Division to stem the advance on La Haye du Puits and the bocage country in the area greatly assisted the enemy's defensive tactics.

Meanwhile, on 4 July, VII United States Corps attacked south-west of Carentan with 83 Division. Again progress was very difficult owing to the numerous water obstacles and bocage, but by 5 July the edge of the flooded area north of St Eny was reached. In this area the enemy was located in very strong positions from which he counter attacked. Attempts to outflank the opposition on the night 6/7 July by 4 Division were unsuccessful, but in the morning further progress was achieved north-east of St Eny. The following day 83 Division was heavily attacked by 2 SS Panzer Division which had been switched from the Odon sector.

Farther east XIX United States Corps captured St Jean-de-Daye on 7 July, and continued its advance to within four miles of St Lo.

Clearly the enemy was now becoming increasingly anxious about his western flank, and I determined to redouble our efforts on the Second Army front to prevent the switching of additional armoured forces against the Americans. It was moreover apparent that the American operations, designed to secure the general line of the Periers-St Lo road, as a preliminary to the main assault to the south, were going to take time. The terrain gave the German defenders every advantage; there were very few good roads across the extensive marshlands and floods; the bocage country was extremely thick; the weather was atrocious and not only restricted mobility and caused great discomfort to the troops, but seriously limited any attempts to give them support from the air; and, owing to maintenance difficulties, ammunition remained in short supply.

The Capture of Caen, 7-9 July

On 1 July the SS formations made their last and strongest attempt against the Second Army salient. 1, 2, 9, 10 and 12 SS Divisions formed up with their infantry and tanks and made

repeated, though not simultaneous, attacks against our positions. All of these attacks were engaged by our massed artillery with devastating effect, and all but one were dispersed before reaching our forward infantry positions.

At the time, the strength of these attacks was perhaps underestimated owing to the efficacy of our defensive fire. Later, identifications and captured strength returns showed how many units were involved and how heavy their casualties had been. At one place alone, on the Rauray spur, the enemy got to grips with our defences. An infantry battalion of 2 SS Division and a tank battalion of 9 SS Division closed with a battalion of 49 Division and a regiment of 8 Armoured Brigade. Heavy fighting continued at intervals throughout the day, and at the end of it our positions were intact, while thirty-two enemy tanks had been knocked out.

Although no further attacks on this scale were made by the enemy, local counter attacks continued. The enemy went over to the defensive again, and showed himself particularly sensitive to further efforts to outflank Caen from the south-west.

It was about this time that von Rundstedt was relieved of his command, to be replaced by von Kluge. From then on Hitler's personal, and, as it proved, fatal interference in the strategy and even the tactics of the battle for France was unchecked.

Meanwhile it became apparent that the enemy was bringing in fresh infantry on our eastern flank, presumably with the intention of relieving his armour; 16 GAF Division was identified east of the Orne and 276 Division near Tilly-sur-Seulles on 3 and 4 July respectively.

Second Army's intention now was to continue the battle for Caen by a direct assault from the north. As a preliminary, 3 Canadian Division attacked Carpiquet on 4 July with the object of securing the airfield and of freeing the western exits from Caen. The village of Carpiquet was entered quickly, but round the airfield to the south fierce fighting took place and continued for several days. 12 SS Panzer Division put up a stout fight and delivered a series of counter attacks, with the result that the airfield area was not finally cleared until 9 July. In conjunction with the operation at Carpiquet, 43 Division attacked north-eastwards astride the Odon from the 8 Corps salient, in order to loosen the opposition on the Canadian front. This move was also strongly contested.

For the direct assault on Caen, 1 Corps employed three divisions with two armoured brigades in immediate support, and a third readily available. The plan involved an assault against well organized and mutually supporting positions based on a number of small villages which lay in an arc north and north-west of the city, and, in view of the strength of these defences, I decided

to seek the assistance of Bomber Command RAF in a close support role on the battlefield.

For some time previously the problem of applying the tremendous weight of heavy bombers in immediate support of a major assault had been under consideration. There were many factors involved both from the Air Force and the Army points of view before assistance of this nature could be sought. There was the higher policy question whether it was justifiable to divert heavy bomber effort from its main strategic role; and there were technical problems concerning the practicability of bringing the bomblines close enough to the starting position of the assault troops to ensure that the attack would strike the vital enemy defensive area. An added complication arose from the problem of cratering, and a compromise had to be made between delay-fused bombs, which entailed cratering, and the instantaneous-fused bombs which, while causing less obstruction to subsequent mobility, had less destructive effect on prepared defences. To some extent this problem had to be decided by experience.

The Supreme Commander supported my request for the assistance of Bomber Command, and the task was readily accepted by Air Chief Marshal Sir Arthur Harris.

Since this was the first time that we had attempted a battle of this nature, it was jointly decided with Bomber Command that the bomblines would not be brought nearer than six thousand yards from our leading troops; on theoretical calculation this left an adequate safety margin.

The plan was for the three attacking divisions to converge on Caen, clear the main part of the town on the west bank of the Orne and seize the river crossings. The air bombardment was designed to destroy enemy defensive positions and artillery, and to cut off the enemy's forward troops from their lines of supply in rear. The target area was a rectangle on the northern outskirts of Caen approximately four thousand yards wide and fifteen hundred yards deep, in which there were known to be an enemy headquarters and defensive positions. In addition to the material damage, much was hoped for from the effects of the percussion on the enemy defenders generally, and from the tremendous moral effect on our own troops. The defences between the bomber target area and the front line were to be dealt with by concentrated artillery fire. It was obviously desirable that the bombing attack should immediately precede the ground assault, but owing to the weather forecast it was decided to carry out the bombing on the evening before the attack and aircraft were therefore timed over the target between 2150 and 2230 hours 7 July, while the ground attack was to commence at 0420 hours on the following morning. 460 aircraft, each carrying approximately five tons of mixed 500 lbs

and 1000 lbs bombs, carried out a remarkably accurate operation. The ground attack started as planned and good progress was made during 8 July. The brunt of the attack fell on 16 GAF Division newly arrived from north of the Seine; 21 and 12 SS Panzer Divisions were hurriedly committed to assist in stemming our progress. By nightfall, 3 Canadian Division had secured Franqueville, while tanks and armoured cars closed in on the western outskirts of Caen. In the centre 59 Division cleared St Contest and La Bijude, while 3 Division got into the north-east corner of Caen and directed 33 Armoured Brigade to the bridges. During the night armoured patrols came up against anti-tank guns and large numbers of mines and were impeded by the cratering and obstruction caused by the bombing. On the morning of 9 July, 3 Division reached the dock area and met troops from 3 Canadian Division who had entered the town from the west; at the end of the day Canadian troops were firmly established in the Carpiquet airfield area with elements at Bretteville-sur-Odon. Mopping up in the town continued on 10 July. The bridges over the river in the city were either destroyed or completely blocked by rubble, and the enemy remained in occupation of the suburb of Faubourg-de-Vaucelles on the east bank.

Investigation showed the tremendous effect of the heavy bombing on the enemy; some German defenders were found still stunned many hours after the attack had been carried out. The troops in the defences north of the town were cut off and received no food, petrol or ammunition as a result, while one regiment of 16 GAF Division was wiped out. The Bomber Command attack played a vital part in the success of the operation. Difficulties, however, arose from the cratering and the obstruction from masonry and debris caused by the bombing, and it will be seen that in our next operation of this nature it was decided to employ small bombs with instantaneous fuses.

The capture of Caen greatly simplified our problems on the eastern flank, as we had now eliminated the enemy salient west of the river and were well placed to continue operations for extending our bridgehead to the east of it.

The Situation, 9 July

My aim remained to launch the break-out operation on the western flank as soon as possible, and meanwhile to hold the main enemy forces on my eastern flank.

There were two very disquieting developments in the enemy situation during the first week in July. The identification of 2 SS Panzer Division in the American sector round St Eny, showed the enemy's determination to strengthen his resistance in the west in

spite of Second Army's endeavours to prevent it. Moreover we had identified fresh infantry divisions on the eastern sectors, which were relieving Panzer formations in the line; during the week 1 SS, 2 SS, Lehr and 21 Panzer Divisions were known to have been withdrawn wholly or partially into reserve.

It was vital for us to counter these measures urgently.

Therefore the impetus of Second Army operations had to be maintained at maximum pressure, and in a manner which would have the most direct and immediate effect on the enemy and force him to react.

Before discussing the courses of action open to us to achieve this object, it is important that I should explain in detail my conception of how operations should develop on the eastern flank.

It has been made abundantly clear that the role of Second Army was to contain the main enemy strength and to wear it down by sustained offensive action. Thereby I was creating the opportunity to launch the break-out by First United States Army under the best possible conditions. Second Army was succeeding in its role because the enemy was determined to ensure that we were prevented from exploiting our armoured resources and superior mobility in the better country south-east of Caen. Once we became established in strength on the high ground south of Bourguebus, with lateral routes south of Caen, and with our eastern flank up to the sea secure, we would be able to launch attacks in strength to the south and south-east. By this means we could immediately threaten the important communication centres of Falaise and Argentan, which were vital to the enemy in Normandy in view of the main east—west lateral routes which passed through them. We could moreover threaten to drive into the Seine basin either towards Paris, or the Seine ports of Rouen and Le Havre; such moves would immensely increase the existing difficulties on the enemy's lines of communication, and drive a wedge between the German Seventh and Fifteenth Armies.

It followed, as I have already remarked, that the key to retaining strong enemy forces on the eastern flank was the establishment of strong forces in the area south-east of Caen, and the violence of the enemy's reaction to our operations in the Caen sector had amply shown the measure of his determination to prevent our progress in that direction. We were thus achieving our immediate object.

Meanwhile I had in mind also the longer term aspect of our eastern flank operation. It has been shown that my intention was to swing the main break-out thrust from the west flank eastwards to the area Le Mans—Alençon. It would then be necessary for Second Army to wheel south and east to come into line with the American forces, so that the whole front would face east and

north-east. While the American right flank closed the routes from Normandy to the gap between the Loire and Seine, the rest of the Allied strength would drive the enemy back against the Seine below Paris, while the air forces kept the bridges out and harassed the ferries.

Second Army had therefore to position itself for delivering a major thrust east of the Orne when the right time came: that would be when the American break-out operation had gathered momentum and was striking east.

There were other urgent reasons for wanting to develop our bridgehead east of the Orne. The eastern sectors of the bridgehead were becoming very cramped; we required more space for airfield construction and for administrative development.

What were the main tactical requirements to be attained in order to establish major forces south-east of Caen and to exert with maximum intensity the direct threat to Falaise?

First: we had to extend the bridgehead in order to gain space to manoeuvre; this could be achieved best by attacking from the existing bridgehead to the south, south-east and east. *Secondly:* we required a firm left flank, so that we could launch major attacks to the south without fear of becoming unbalanced by enemy action on our left rear; if we could extend our bridgehead to the River Dives this requirement would be satisfied. *Thirdly:* we required lateral east-west routes, which passed south of the Caen bottleneck. We should not achieve our object if we created a salient south-east of Caen and had to rely on maintenance routes which involved a long detour to the north through Caen or across the bridges north of the town; it follows that we had to thrust south between the Odon and the Orne in order to open lateral routes to the west.

To sum up, there were two major projects to be undertaken on the Second Army front; an attack east of the Orne to extend the existing bridgehead and establish armour in strength east of the river, and a thrust between the Odon and the Orne to open lateral routes.

The immediate problem was to prevent the transfer of enemy reserves to the American sector. Speed was the paramount factor and it was therefore decided to begin with operations between the Odon and the Orne, because they could be started more quickly than a major attack east of the Orne. An added advantage was that a thrust directed on Thury Harcourt-Mont Pincon would closely threaten the rear of enemy forces operating in the area west of St Lo, and would strike towards the dominating Mont Pincon feature.

I therefore ordered Second Army to operate immediately in strength towards the south, with its left flank on the River Orne.

The objective was the general line Thury Harcourt-Mont Pincon-Le Beny Bocage.

At the same time rapid preparations were to be made to launch a major armoured thrust east of the Orne. This task was to be undertaken by 8 Corps with a force of three armoured divisions; Headquarters 8 Corps was to be relieved in the line by Headquarters 12 Corps, which was coming ashore at this time.

I also ordered Second Army to prepare to take over the left divisional sector of First United States Army, in order to free additional resources for the American break-out.

There were no changes in my orders for First United States Army. I emphasized again the need for speed. We required to get going before the enemy found the means to increase his forces on the western flank, and to take advantage of the situation I was creating on the eastern flank in the renewed Second Army offensives. An additional important factor was the urgency of securing the Brittany ports; we were reaching the limit of the beach capacities and experience at Cherbourg showed that the enemy's demolition policy was very thorough and that considerable time would be required to develop facilities in the ports we captured. Moreover we could not count on continuing beach working after the early autumn, by which time it was vital to have deep water port facilities at our disposal. I planned to swing the right hand American corps into the Brittany peninsula as soon as the base of the Cotentin peninsula was reached; at this time Headquarters Third United States Army would become operational and take charge of the operations in Brittany. Planning was in hand for securing St Malo quickly; the desirability of employing airborne troops to seize the port was studied, though I preferred to retain them for use in the Vannes area, from which they could operate to capture Lorient or Quiberon Bay. It was at this time thought preferable to concentrate on ports at the base of the Brittany peninsula, since the railway and road routes through the peninsula itself were very vulnerable to demolition and would therefore probably involve difficult and lengthy repairs. Again the immensity of the task of reopening demolished ports resulted in plans being prepared for creating a deep sea port in Quiberon Bay.

Second Army Operations, 10-18 July

During the period 10-18 July, Second Army delivered a series of thrusts, with the primary object to make progress southwards towards Thury Harcourt: all operations were related to this task and to the maintenance of pressure on as broad a front as possible.

At 0500 hours 10 July, 43 Division with a tank brigade attacked

towards the high ground at Point 112 and the villages of Feu-guerolles and Maltot, in the Orne valley. The high ground about Point 112 and Eterville was secured, but a strong counter attack drove our troops out of Maltot. Because Maltot was overlooked from the east bank of the Orne it was untenable until we had secured the high ground on that side of the river. On the following day Point 112 was held in spite of further counter attacks, mainly by 10 SS Panzer Division, assisted by 9 SS Panzer Division, which had recently been withdrawn from the line for a rest.

On 11 July, 50 Division attacked the Hottot area in 30 Corps sector, and captured the high ground north-west of the village, while farther east 49 Division made some limited advances. On the same day, on 1 Corps front, 51 Division attacked Colombelles and its factory area on the east bank of the Orne. After some initial success the Highlanders were forced back in the face of strong counter attacks.

During 12 and 13 July considerable regrouping was taking place within Second Army. 12 Corps took over the 8 Corps sector of the line, while 2 Canadian Corps became operational with 2 and 3 Canadian Infantry Divisions under command; this Corps took station between 12 Corps and 1 Corps.

30 and 12 Corps continued major attacks on 15 July. The object of the 30 Corps operation was to secure the Noyers area and to exploit towards the high ground north-east of Villers Bocage. 59 Division led the attack, and by the evening of 16 July had enveloped Noyers on three sides; farther west, 50 Division made limited progress. These operations advanced our line west of Tilly-sur-Seulles about three miles; in all sectors the enemy had reacted sharply, and was still succeeding in plugging the holes.

The attack by 12 Corps began on the night of 15 July. 'Movement light', or the employment of searchlights directed to reflect from the clouds and give a degree of visibility at night over the area of operations, was used for the first time in battle, and proved a great success. The object of the attack was to secure the line Bougy—Evrecy—Maizet, and by the morning of 16 July Gavrus, Bougy and Esquay had been occupied; a number of counter attacks round Bougy was repulsed and mopping-up was in progress. On the left, supporting operations were mounted in the area of Point 112; meanwhile 53 Division attacked north of the Odon and, after some hard fighting, secured Cahier which had changed hands several times. At night a strong attack was put in to secure Evrecy and continued for some twenty-four hours; the fighting was confused; the enemy made repeated counter attacks and succeeded in holding on to the village.

The 12 and 30 Corps attacks had thus not made much ground

by 18 July, but the fighting had been severe, and above all we were attaining our object by pulling the enemy armour back into the line. 1 SS Panzer Division was identified in counter attacks round Esquay, where 10 SS Panzer Division was also heavily engaged; 9 SS Panzer Division was committed at Evrecy and Maltot; the 1 Corps operations at Colombelles had prevented 21 Panzer Division from continuing with its projected refit. To sum up, the enemy had now only 12 SS Panzer Division out of the line in the woods north of Falaise, where it was refitting, in spite of having brought 16 GAF, 276 and 277 Divisions into the line.

First United States Army Operations, 10-18 July

First United States Army continued its advance southwards; by steady pressure and hard fighting it gradually overcame the difficulties of terrain and the increased enemy opposition.

On the right, VIII Corps made good progress in the sector between the marshlands and the western coast, and by 14 July had reached the general line of the north bank of the River Ay, with patrols west of Lessay. Here they were checked while operations developed further east. In the centre sector VII Corps made ground west of the River Taute, and XIX Corps pushed on between the Taute and the Vire. An enemy counter attack on 11 July aimed at St. Jean de Daye was beaten off by VII Corps after some heavy fighting. Just as 2 SS Panzer Division had been rushed from the western flank to stem the American progress towards Periers, Panzer Lehr Division was switched to the east to bolster the defence of St Lo; its efforts were however abortive, and cost the enemy heavily in personnel and material. On 16 July, XIX Corps mounted a strong attack with two divisions against St Lo. The formations were to converge on the town from the north and east, and heavy fighting continued for three days; on 17 July some accurate close support bombing from the air proved decisive in driving back a strong enemy attack by infantry and armour, and on the following day assaulting forces closed in on St Lo; by evening, 29 Division had forced its way into the town and completed its capture. On the extreme left V Corps improved its positions in conjunction with the XIX Corps operation towards St Lo.

Thus by 18 July First United States Army was in possession of St Lo, and of the ground west of the River Vire which was required for mounting the major break-out assault operation to the south.

The Situation, 18 July

We were now on the threshold of great events. We were ready to break out of the bridgehead.

We still firmly retained the initiative. We had prevented the enemy from switching further reinforcements to the western flank and had forced him to commit again the armoured forces he had sought to withdraw into reserve. We had continued to punish the enemy severely, and force him into what I call 'wet hen' tactics—rushing to and fro to stem our thrusts and plug the holes in his line.

The sooner we got going on the western flank the better, while the setting for the break-out remained favourable. Apart from the local conditions in Normandy, it seemed impossible that the enemy should continue much longer to anticipate an invasion in the Pas de Calais; however great his anxiety for the safety of the flying bomb sites, he must surely soon give overriding priority to the Normandy battlefield, and when he took that decision substantial reinforcements would become available from Fifteenth Army.

I have said how important it was to my plans that, once started, the break-out operation should maintain its momentum. It was therefore essential to ensure that the assault would make a clean break through the enemy defences facing the Americans, and that a corridor would be speedily opened through which armoured forces could be passed into the open country. To make sure of this, it was decided to seek heavy bomber assistance; but because of the weather, the operation had to be progressively postponed until 25 July in order to obtain favourable flying conditions.

Meanwhile on the eastern flank offensive operations were sustained; by 17 July 8 Corps was ready to begin the offensive east of the Orne.

The operations of 8 Corps between 18 and 21 July gave rise to a number of misunderstandings at the time. It was a battle for position, which was designed first to bring into play the full effect on the enemy of a direct and powerful threat to Falaise and the open country to the east of the town, and secondly to secure ground on which major forces could be poised ready to strike out to the south and south-east, when the American break-out forces thrust eastwards to meet them. I now believe that the misconception concerning this operation arose primarily because the forthcoming battle for position was in fact the prelude to operations of wider scope, which, when the time came, were to form part of the Allied drive to the Seine. Added to this, the break-out operation by First United States Army was, for obvious reasons, being kept a close secret, and, since it was clearly time we broke the enemy cordon surrounding us, it was understandable that a major operation of this kind should suggest wider implications than in fact it had.

The British Offensive east of the Orne, 18—21 July

While 12 and 30 Corps operations were in progress west of the River Orne, preparations for a major thrust east of the river were completed with all possible speed. Additional bridges were constructed north of Caen and ultimately there were five Class 40 crossings available between Ouistreham and Blainville. Three corps were employed in the operation, the major role being played by 8 Corps, which was to pass over the Orne bridges through 1 Corps bridgehead and establish an armoured division in each of three areas: Hubert Folie-Verrieres, Vimont, and Garcelles Secqueville. The armoured divisions were to dominate the area described and fight the enemy armour which would come to oppose them, and opportunities were to be exploited of pushing armoured cars south towards Falaise in order to cause maximum dislocation to the enemy.

2 Canadian Corps was to cross the Orne and clear the Colombelles factory, the suburb of Faubourg de Vaucelles and the village of Giberville. These operations were designed to open up the south-eastern exits from Caen and to mop up the enemy in that area. 1 Corps was made responsible for ensuring that the existing bridgehead was firmly held, and was to protect the left flank of 8 Corps by securing the villages and woods west of Troarn.

The air programme was arranged for first light 18 July in direct support of the attack. About 1100 heavy bombers of Bomber Command and 600 of Eighth United States Air Force, together with 400 medium bombers of Ninth United States Air Force were to be employed. It was planned for the heavy bombers to strike, with delayed fuse bombs, on the flanks of the frontage of attack and on strong points and concentration areas in rear. The medium bomber aircraft, using fragmentation bombs with instantaneous fuses, in order to avoid cratering, were to strike in the area directly facing the frontage of the 8 Corps assault. On 18 July, heavy bombers attacked between 0545 and 0630 hours, followed by the medium bombers which operated from 0700 to 0745 hours. The leading troops began the assault at 0745 hours, and both 1 and 8 Corps started off well. 11 Armoured Division, leading the 8 Corps attack, was directed on the area Hubert Folie-Verrieres. By 0900 hours an advance of three or four miles had been made, leading tanks reaching the line of the railway near Demouville while infantry was clearing the village of Cuverville in rear. At the same time 3 Division was attacking the villages west of Troarn and had got into the outskirts of Touffreville. On the right 3 Canadian Division, leading 2 Canadian Corps, made slower progress owing to bomb craters and to the very determined enemy resistance at Colombelles.

Throughout the morning the attack continued to make progress; Guards Armoured Division operated on the east flank of 11 Armoured Division and was directed on Vimont. By midday, 11 Armoured Division was in the area Tilly la Campagne-La Hogue. Guards Armoured Division had reached Cagny-Emieville and 7 Armoured Division, whose task was to deploy between the other two formations, was moving forward to the front. Progress was being made in spite of considerable anti-tank gunfire, as there were a number of German 88 millimetre dual purpose guns in the area which had originally belonged to the flak defences of Caen.

In the afternoon the enemy opposition stiffened considerably and counter attacks were developed, the largest being delivered by some fifty to sixty German tanks which advanced against 11 Armoured Division from the Bourguebus area. Resistance was stubborn in the villages about the railway and road from Caen to Lisieux, and in particular a strong anti-tank gun screen south-east of the line Emieville-Frenouville prevented further progress in that direction. On the flanks progress was maintained. 3 Canadian Division cleared Colombelles and occupied Giberville, while, west of the Orne, 2 Canadian Division was fighting hard near Louvigny. On the left flank 3 Division was firmly established in Touffreville, Sannerville and Banneville, but an attack to secure Troarn had met with little success.

The plan for 19 July was for the armoured divisions of 8 Corps to push on to their objectives, while 2 Canadian Corps opened the routes from Caen through the east bank suburbs and 1 Corps continued its operation against Troarn. Our tank casualties on 18 July had been considerable; over 150 tanks were reported out of action in the three armoured divisions.

Progress during the day was slow, as increased enemy reserves were concentrated against us. 3 Canadian Division cleared Faubourg de Vaucelles and Cormelles, and 2 Canadian Division captured Louvigny on the left bank of the Orne and Fleury and Ifs on the right bank. In the 8 Corps sector, Guards Armoured Division occupied Cagny. 1 Corps operations continued round Troarn. The enemy made strenuous efforts to stem our advance and to deny us the high ground in the Bourguebus area. Apart from 21 Panzer Division and 16 GAF Division operating on our east flank, elements of 1 SS, 9 SS and 10 SS Panzer Divisions were all brought into this battle, having been rushed from west of the Orne, and even a battle group of 2 Panzer Division, switched from the Caumont sector, was identified; this latter arrival was clear evidence of the enemy's anxiety and provided an excellent indication of the success of our strategy in working for the establishment of what I shall now call 'the threat to Falaise'.

On 20 July our attacks continued although heavy rain after midday began to slow down operations. 2 Canadian Corps captured St Andre sur Orne but later attempts to secure the high ground about Verrieres were unsuccessful. The enemy counter attacked 2 Canadian Division in this sector repeatedly, employing battle groups of infantry and tanks. The armoured divisions of 8 Corps made some further progress, as a result of which both Bourgebus and Frenouville were captured.

But the rain continued and began to turn the battlefield, which previously had been inches deep in dust, into a sea of mud. We had, however, largely attained our purpose; in the centre 8 Corps had advanced ten thousand yards, fought and destroyed many enemy tanks, caused considerable casualties to the enemy infantry, and taken two thousand prisoners. The eastern suburbs of Caen had been cleared and the Orne bridgehead had been more than doubled in size. On the evening of 20 July our new line ran from the Orne near St Andre to Bourguebus, Cagny and the outskirts of Troarn. We had mounted 'the threat to Falaise' and the enemy had thrown in his available resources, being forced once again to react strongly to our thrust.

Orders were now issued for infantry to take over from the armour, which was to be withdrawn into reserve.

The Situation, 21 July

The situation on the eastern flank was now greatly improved, and we had drawn the German armour east of the Orne again and caused heavy losses to the enemy. We had not yet pushed the extreme left flank up to the Dives, and we still needed more ground in the area between the Odon and the Orne. In order to be properly poised for subsequent operations to the south, I wanted to establish our line along the River Dives from the sea to Bures, thence along the Muance to St Sylvain, and on through Cauvicourt, Gouvix and Evrecy to Noyers and Caumont.

My orders on 21 July were for First Canadian Army and Second British Army to develop operations in order to secure this line.

Headquarters First Canadian Army (General Crerar) was to take the field on 23 July, when it would assume responsibility for the extreme left flank sector, taking 1 Corps under command. 2 Canadian Corps was to remain under Second Army for the moment. On 24 July, Second Army was to take over the left divisional sector of First United States Army, thus releasing American troops for operations elsewhere.

I further ordered Second Army to hold in reserve a corps containing at least two armoured divisions ready to strike south

from our Orne bridgehead when the opportunity came to implement the manoeuvre which I have already described.

There was no change in the roles for First and Third United States Armies; it should be noted, however, that as soon as Third United States Army became operational, Headquarters Twelfth United States Army Group were also to become operational, under the command of General Omar Bradley, in order to control the two American Armies. This Army Group was to remain under my operational control.

At this stage I appreciated that I should have to be ready to launch a major attack by Second Army on Falaise early in August, on the assumption that the American drive would make rapid progress once it turned eastwards. While the break-out was gathering speed I planned to continue operations on the Second Army front which, in addition to drawing the enemy's attention, would improve our bridgehead east of the Orne and our positions between the Orne and the Odon, with a view to facilitating the ultimate operations against Falaise. The first attack was planned east of the Orne in order to secure Garcelles Secqueville and Point 122 on the Falaise road; 2 Canadian Corps was to undertake this task.

Operations, 21-24 July

During the period 21-24 July the United States forces were still waiting for favourable weather which would enable the Air Forces to give them the required send-off for the break-out operation.

Meanwhile in order to give the enemy no respite and to adjust the Second Army front between the Orne and the Odon, 43 Division of 12 Corps carried out limited operations during the period 22-24 July. At long last Maltot was captured and a fresh attack was made on Point 112 north of Esquay. This provoked a strong counter attack as a result of which the enemy regained possession of the high ground.

The Situation, 24 July

The enemy was continuing his policy of trying to contain us. Every time we punched a hole in the infantry, he made desperate efforts to plug it with his Panzer reserves. As soon as he got a respite, as many of them as possible would be withdrawn to await the next crisis.

There was no long term plan behind this dogged defence in the bocage. In Berlin, it is true, they were nursing hopes of one day being able to concentrate for a final blow to drive the

Allies back to the sea. Such dreams were not shared by the local commanders, many of whom were already pressing for a planned withdrawal to the Seine before the armies were completely destroyed where they stood. Meanwhile, they tried to sustain the morale of their troops by promises of new and secret weapons. If only they could hold on for a little while longer, they were told, it would give sufficient time for terrible weapons to be brought into action and victory would be assured.

About this time, Rommel was severely injured in a road strafing attack and took no further part in the campaign.

The enemy was forced to thin out from the Pas de Calais in view of his growing weakness in Normandy, and infantry divisions from Fifteenth Army north of the Seine were called down as fast as the limited transport facilities permitted.

The decision was made too late: the divisions arrived so slowly and so piecemeal that they were to find themselves reinforcing failure.

SECOND PHASE: THE BREAK-OUT

The Launching of the Break-Out, 25-27 July

The break-out operation made a false start on 24 July. Two thousand aircraft took off for the air bombardment and arrived over the target area, but heavy cloud and thick mist greatly restricted visibility, and the majority of the aircraft had to return to their bases without dropping their bombs, and the ground attack was postponed. This unavoidable set-back would, I feared, betray to the enemy our intentions and the frontage of our proposed attack, and caused me considerable anxiety. I feared lest the enemy would take some immediate steps to strengthen his forces on the First United States Army front. There was nothing I could do about it at this stage except to ensure that the Second Army projected operations were carried through at once and with the utmost intensity. I hoped that thereby the enemy might be persuaded that the bombing on the American front was a form of feint. I have mentioned that I had already ordered Second Army to start the next stage in its operations by securing Garcelles Secqueville and Point 122 on the Falaise road; I gave orders that this attack was to start at all costs on 25 July. 2 Canadian Corps, which was responsible for the operation, was ready and in fact started at 0330 hours on 25 July.

On 25 July weather conditions improved and the break-out operation began.

First United States Army plan was to deliver a break-in assault against the enemy defensive positions with VII United States

Corps employing three infantry divisions. The attack was to cross the Periers-St Lo road roughly between Le Mesnil Vigot and Hebecrevon directed on a frontage from Marigny to St Gilles. The attacking divisions were then to face outwards in order to establish the flanks of the break-in area. Meanwhile a force of two armoured and one infantry divisions was to thrust through the corridor thus formed. The right hand division was to wheel right towards Coutances, by which means it was hoped to cut off all the enemy in the area of Lessay and Periers; the left hand armoured division was to pass through Canisy followed by the infantry division, directed on the general line Notre Dame le Genilly-Fervaches in readiness for further exploitation as decided. Twenty-four hours after the VII Corps assault, VIII Corps in the coastal sector was to advance south; this formation had four infantry divisions and one armoured division. XIX United States Corps was also to launch attacks in the St Lo sector, beginning simultaneously with VIII United States Corps.

These operations were the prelude to the American advance to cut off the Brittany peninsula, reach the Loire and swing east to the line Le Mans-Alencon.

The air plan for the assault phase included bombardment of an area 6000 yards wide by 2500 yards deep on the frontage of VII United States Corps by 1500 heavy bombers of the Eighth United States Air Force, together with an attack by some 400 medium bombers on an adjacent target area. In order to strike the foremost enemy defenders, the American troops were withdrawn 1200 yards to the north of the heavy bomber target area. Zero hour for the assaulting infantry was 1100, and it was hoped that the assaulting troops would regain their start line before the enemy had time to recover from the air attack.

At 1100 hours the infantry of VII United States Corps moved forward, and it quickly became apparent that the results of the air bombardment had been devastating. Enemy troops who were not casualties were stunned and dazed, and weapons not destroyed had to be dug out and cleaned before they could be used; communications were almost completely severed. By the end of the day the American troops had advanced some two miles to the general line La Butte-La Chapelle-en-Juger-Hebecrevon. On 26 July, although there was heavy resistance in the west of the penetration area, opposition on the front was light and considerable advances were made; the armoured divisions were set in motion, Marigny and St Gilles were captured and the advance soon reached Canisy and the line of the Canisy-St Lo railway.

Meanwhile, on the right, VIII Corps attacked at 0530 hours. Attempts to pinch out Periers were unsuccessful, but by dark the

main Periers-St Lo road had been cut. In V Corps sector, advances of 2000-3000 yards were made east of St Lo.

On 27 July the decisive actions of the operation took place. The enemy began to withdraw along the entire front, and Lessay and Periers were occupied. In the central sector, mobile columns were sent within two miles of Coutances where the enemy was trying desperately to keep open an escape corridor for his troops withdrawing along the coast. On XIX Corps front the enemy was cleared out of the loop in the river Vire immediately south of St Lo.

Operations on the Eastern Flank, 25-27 July

I have already shown that an attack by 2 Canadian Corps southwards along the Falaise road started at 0330 hours on 25 July. Steady progress was made and by midday St Martin de Fontenay and the high ground about Verrieres were reached, and Tilly la Campagne had been captured. As the advance continued, however, enemy opposition hardened and a considerable number of enemy tanks came into action north of the line May-sur-Orne-Roquancourt. During the afternoon a strong tank counter thrust pushed our line back, and our troops were evicted from Tilly. The German forces in the sector included 1 SS, 9 SS, 12 SS and 21 Panzer Divisions, and it was clear that any further thrust in this sector would not only be contested by a great weight of armour, but also that there were strong contingents of 88 millimetre guns, well sited, in support. It was therefore necessary to discontinue our thrust during the night 25/26 July.

The Situation, 27 July

The break-out thrust had been delivered, and the operation was making excellent progress. It was now essential to ensure that all our efforts went to further the speed and progress of the American drive, and on 27 July I was carefully considering the proposed plan of action for the British and Canadian forces in the sectors east of the River Odon, and wondering whether these projects were in fact the most profitable we could devise from the point of view of helping the Americans forward.

The enemy had very powerful forces in the Orne sector; there were six Panzer and SS Panzer divisions on the Second Army front, all of which were east of Noyers. West of that place there was no German armour facing the British, and therefore the situation was favourable for delivering a very heavy blow on the right wing of Second Army in the Caumont sector. If we could regroup speedily and launch a thrust in strength southwards from

the Caumont area directed on Foret l'Eveque and Beny Bocage, and ultimately to Vire, the effect would be to get behind the German forces which had been swung back to face west by the American break-through; any attempt by the enemy to pivot on the River Vire or in the area between Torigny and Caumont would thus be frustrated, as we should knock away the hinge. I therefore ordered Second British Army to regroup in order to deliver a strong offensive on these lines; not less than six divisions were to be employed, and the operation was to proceed with all possible speed. In the meantime First Canadian Army and the remainder of Second Army were to maintain the maximum offensive activity on the rest of the front in order to pin the enemy opposition and wear it down.

United States Operations, 28 July—4 August

While Second British Army was switching its main weight to the Caumont sector, the progress of the break-out operation proceeded apace. On 28 July, 4 and 6 Armoured Divisions passed through the infantry on the western sector and thrust south towards Coutances. The town was captured in the afternoon and firm contact was established there between VIII and VII Corps. To the south-east, troops of VII and XIX Corps had got to within five miles of the main Avranches—Caen road. All reports indicated that west of the River Vire to the coast the enemy was completely disorganized.

First United States Army ordered VIII Corps to continue the drive to the foot of the Cotentin peninsula with VII Corps on the left; XIX and V Corps were to continue their eastern thrusts in conformity. On 29 July, with its armoured divisions leading, VIII Corps forced the crossing of the River Sienne west of Coutances and captured Cerences; on its left VII Corps made good progress towards Gavray and Percy. Progress was slower in XIX and V Corps sectors, where some substance of enemy organization existed, helped by the arrival of 2 Panzer Division from the east, and it became evident that the enemy was trying to wheel back the line, pivoting on the general area Tessy-sur-Vire—Torigny-sur-Vire—Caumont.

During the last two days of the month the advance in the coastal sector maintained its momentum. On 31 July both Granville and Avranches were captured. A bridgehead was seized over the River See and forward troops pushed on to Ducey where a crossing was made over the River Selune. The See was also crossed in the Brecey area.

On V and XIX Corps sectors the enemy opposition continued to be desperate, but V Corps succeeded in capturing Torigny on

31 July, by which time it will be seen that Second Army was thrusting south in the Caumont area in order to break the enemy hinge on which he was attempting to pivot and re-form the front. On 1 August, Headquarters Third United States Army became operational, taking command of VIII United States Corps. This Corps moved south and west into Brittany with the task of cleaning up the peninsula and capturing its ports. While VII United States Corps continued its advance southwards, XIX Corps closed up to the general line Percy-Tessy, and on the left flank V Corps continued its progress towards the River Vire. On the left, V Corps troops pushed on beyond Forêt l'Eveque in conjunction with Second Army which was approaching Le Beny Bocage. On the following day VII Corps reached St Pois and Mortain, while XIX Corps crossed the Villedieu-Caen main road; west of Le Beny Bocage, V Corps secured bridgeheads over the River Vire.

The enemy established some strong centres of resistance on 3 August which delayed VII Corps progress, but by the following day spearheads of the American advance had reached the general line Fougères-Mortain-Forêt de St Sever—exclusive Vire. On the right of this frontage XV Corps was brought into the line, and placed under Third United States Army; VII Corps was in the centre, and on the left XIX Corps was gradually pinching out V Corps which was closing towards Vire. On the left sector of the American line the enemy was now exerting considerable pressure as 116 Panzer, as well as 2 Panzer, had joined 2 SS Panzer Division in covering Vire.

British and Canadian Operations, 28 July-4 August

Second Army regrouped with creditable speed, and it was found possible to commence the thrust southwards from the Caumont area on 30 July.

The Army right flank followed the River Drome about Vidouville, some four miles west of Caumont; on the west bank of the river, V Corps, of First United States Army, was at this time advancing on Torgny-sur-Vire. From Vidouville the British front skirted Caumont to the south and then swung north-north-east to Livry, and on to the River Seulles near Hottot. The enemy opposing Second Army between Caumont and Esquay about 29 July was believed to be 326, 276 and 277 Infantry Divisions.

The main weight of the attack was to be developed by 8 and 30 Corps on a narrow front. 30 Corps was to wheel south-west, initially to the line Villers Bocage-Aunay-sur-Odon, while 8 Corps, in a wider sweep on its right, swung down to Beny Bocage and on to the Vire-Tinchebray-Conde triangle. Operations were then to

be developed eastwards to the Orne, hinging on 12 Corps which was to conform. The initial objective was the general area St Martin des Besaces-Le Beny Bocage-Foret l'Eveque. While the country in the line of the proposed thrust was typical Norman bocage, it was more hilly and wooded than the areas farther north; the principal feature was formed by a series of hills running south-east between Le Beny Bocage and Aunay-sur-Odon. Some of these hills were over 1000 feet high and they included the Mont Pincon massif.

The attack started on 30 Corps front at 0600 hours 30 July. 43 Division was to secure the hill feature about Point 361 to the west of Jurques, while 50 Division on its left was to secure the high ground west and north-west of Villers Bocage. The attack by 8 Corps was timed to start one hour later with 11 Armoured and 15 Divisions, which were to establish themselves in the area of St Martin des Besaces, protect the right flank of 30 Corps and exploit round the Foret l'Eveque to Point Aunay. Orders provided that, if the situation permitted, 11 Armoured Division was to push on to the south and west irrespective of the progress of 15 Division.

The initial attack was supported by heavy and medium bombers which carried out their attacks in spite of low cloud and bad weather.

Progress on the 8 Corps flank proved easier than on 30 Corps front. The former advanced astride the Caumont-Beny Bocage road; La Fouquerie and Les Loges were soon reached. Meanwhile 30 Corps was experiencing difficulty in crossing a stream which ran through Bricquessard (two miles east of Caumont). This stream had steep banks which were heavily mined and the approaches were covered by well sited anti-tank guns and machine guns. Some progress was made, however, on the right, though 50 Division on the left was held up till nightfall.

On 31 July the attacks continued at first light. 8 Corps secured crossings over the River Soulevre and reached the high ground just west of Le Beny Bocage, while Guards Armoured Division reached Le Tourneur; 15 Division was engaged in mopping up in rear. 30 Corps cleared Cahagnes and approached Jurques, and 50 Division forced the Bricquessard stream and was pushing forward. The opposition in the Beny Bocage area began to stiffen; 21 Panzer Division was now identified with 326 Infantry Division, having been switched from the extreme eastern flank. On 1 August 8 Corps cleared Le Beny Bocage, and the Guards made for Estrzy; 15 Division, holding a firm base for the armour, repulsed counter-attacks delivered by the enemy from the south and south-east. 30 Corps brought 7 Armoured Division in on the left flank and directed it on Aunay-sur-Odon, while 50 Division made further

progress towards Villers Bocage. 43 Division continued its advance during the night with the object of securing Ondefontaine, and was to be followed up by 7 Armoured Division at first light in the morning. On 2 August, 43 Division, having made good progress during the night, moved forward towards Aunay while 50 Division secured Amaye and continued the advance up the Seulles valley. Opposition to 8 Corps was now becoming more stubborn; elements of 11 Armoured Division reached the northern outskirts of Vire and patrols crossed the Vire-Vassy road, but the enemy had not evacuated Vire and there were signs of his being reinforced in the area south of Mont Pincon. The Air Force found good targets among tanks and vehicles moving west in the Conde area. In its advance on Estry, Guards Armoured Division met heavy opposition and was eventually held up. By this time it was known that already 9 SS, 10 SS as well as 21 Panzer Divisions had been swung across from the east to oppose our thrust. In order therefore to add weight to the drive, 3 Division was placed under command of 8 Corps.

Heavy fighting continued on 3 August; south of the Vire-Vassy road 11 Armoured Division was engaged with strong enemy forces, while the Guards continued to be heavily engaged round Estry. 7 Armoured Division was prevented from making further progress by a series of counter attacks. Meanwhile 12 Corps, operating with 53 and 59 Division, was closing up to the Villers Bocage-Noyers road and captured Noyers itself together with Missy.

On the following day 12 Corps troops crossed the Villers Bocage-Noyers road, and 53 Division reached the general line from the Odon near Le Locheur through Evrecy to the Orne near Feuguerolles. The reconnaissance regiments of the attacking divisions began closing up to the Orne from Thury Harcourt northwards.

Progress was slow in both 8 and 30 Corps owing to enemy counter attacks and the great difficulty of the country. 11 Armoured Division, however, made some progress round the south side of Mont Pincon while 7 Armoured Division secured Hermilly, about two miles north-west of Aunay-sur-Orne. Further north, 50 Division entered Villers Bocage. During the first days of August 2 Canadian Corps mounted three attacks east of the Orne as part of the general programme of maintaining pressure in that area. Its operations took place in the area of Tilly la Campagne and La Hogue. They produced violent infantry and tank counter attacks.

The Situation, 4 August

The enemy had been unable to reform his left flank. As the American armour approached Avranches he attempted to hold

a hinge between Percy and Tessy with 2 and 116 Panzer Divisions, but this was frustrated by First United States Army pressure and by the Second Army attack towards Vire. On 31 July, 363 Infantry Division, also from Fifteenth Army, appeared at Villedieu on the Avranches-Caen main road. Meanwhile, as a result of the Second Army advance to Beny Bocage, the enemy brought in 21, 9 SS and 10 SS Panzer Divisions and the front began to firm up between Aunay-sur-Odon and Vire. Desperate resistance continued between these two places, because it was vital for the enemy to hold firm in this sector while his forces to the south-west swung back. At this stage it was assumed he would try to bring his whole line back behind the Orne because, from a strictly military point of view, he was now placed in a situation in which the only logical answer was a staged withdrawal to the Seine. However it was very difficult to forecast the enemy's plans because of the erratic dictation from Berlin. There was still a chance that Hitler would decide to fight the Battle of France south of the Seine which would give us an opportunity of sealing the fate of the Seventh German Army. Meanwhile in Brittany, there appeared to be four divisions in danger of being cut off: and another division in the Channel Islands.

The general situation was now very good. We had broken out of the bridgehead and had destroyed the first hinge on which the enemy had tried to pivot. We were now pressing hard against the next 'key rivet' of his line on the slopes of the Pincon massif. Meanwhile the American drive was beginning to swing towards the east according to plan, and at the same time Third United States Army had turned VIII United States Corps westwards into Brittany.

The time had now come to deliver the major attack towards Falaise, which had so long been the fundamental aim of our policy on the eastern flank. I planned that the Canadians should drive south-east from Caen to gain as much ground as possible in the direction of Falaise, in order to get behind the enemy forces facing Second Army, and to continue the process of wearing down the enemy formations in the sector. I envisaged this operation as a prelude to subsequent exploitation of success.

My orders on 4 August provided for the First Canadian Army attack to be launched as quickly as possible. Meanwhile Second British Army was to continue pivoting on 12 Corps, swinging down towards Thury Harcourt, Conde and Flers; subsequent operations were to be developed towards Argentan. I provided that the northern flank of Twelve United States Army Group should operate on the axis Domfront-Alencon.

I was continuing with my broad strategy of swinging the right flank round towards Paris, so as to force the enemy back

against the Seine. Plans were under preparation for the use of airborne forces in advance of the American columns in order to hasten the closure of the Orleans gap.

Twelfth United States Army Group begins to swing East, 5-6 August

On 5 August, Third United States Army held the line Fougères-Mortain with XV Corps; to the north the First United States Army front ran from Mortain through the Forêt de St Sever to a point of junction with Second Army immediately north of Vire. From right to left the corps in First Army were VII, XIX and V.

XV Corps developed operations to capture Laval and Mayenne and to secure a crossing over the river Mayenne between those places. Progress was rapid and the objectives were secured, but VII Corps ran into heavy opposition, provided by 84 Infantry Division which had recently arrived from Fifteenth Army. XIX Corps was now passing across the front of V Corps as it made further ground to the west of Vire.

VIII United States Corps had turned into the Brittany peninsula and Rennes was liberated on 3 August. Armoured columns pushed on rapidly south of Chateaubriant and by 5 August reached the coast near Quiberon Bay, while in the centre of the peninsula advanced elements were only fifty miles short of Brest.

On 6 August troops of VIII United States Corps reached the River Loire about fifteen miles east of Nantes. On VII Corps front resistance continued to prove stubborn on the left flank; but on the right, forward troops reached Mayenne, where contact was made with XV Corps, and armoured elements were pushed into Domfront. Vire was occupied by XIX Corps in spite of considerable resistance.

Progress in the Brittany peninsula continued, and it was clear that there was no properly organized enemy resistance except in the neighbourhood of the ports. Much useful work had been done before the arrival of the troops by the Resistance Movement, and by the Allied parachute detachments.

Second Army Operations, 5-6 August

As American troops advanced on Vire from the south-west, tanks of 11 Armoured Division were fighting north of the town. In the 8 Corps sector most of 5 August was spent mopping up the enemy pockets which were hindering the supply routes, but in the centre of Second Army front 43 Division continued to converge on Mont Pincon. 7 Armoured Division entered Aunay-sur-Odon during the afternoon and forward troops pushed on about four miles in the direction of Thury Harcourt. 12 Corps

troops closed up to the River Orne on a frontage of seven miles from Grimbosq northwards, but mobility was impeded by the rubble and craters which blocked the roads and villages between the Odon and the Orne.

Throughout 6 August the enemy was attacking between Vire and Mont Pincon. 10 SS Panzer Division made a determined attack against 11 Armoured Division and achieved some initial success, but the ground lost was quickly retaken. Guards Armoured Division was also fighting heavily in the area Le Busq. On 30 Corps front, 43 Division gained a footing on Mont Pincon after severe fighting. Farther east, 59 Division on 12 Corps front attacked across the Orne near Grimbosq and by midnight had forded the river and was holding a shallow bridgehead some two miles in width.

During 5 and 6 August First Canadian Army was making final preparations for its attack southwards in the direction of Falaise.

The Situation, 6 August

On 6 August I issued orders for the advance to the Seine.

I was still not clear what the enemy intended to do. There was no evidence to show on what line he was intending to reform his front; it was evident from the British and Canadian troops in close contact with the Germans east, south-east and south of Caen that he was definitely holding his ground in this sector: he was evidently trying to pivot on the Caen area. Beyond this I was mystified as to how he was endeavouring to conduct his withdrawal; but, as far as the Allies were concerned, I ordered that we should continue relentlessly with our plans to drive him against the Seine, denying him escape routes through the Orleans gap. I emphasized the need for continued and sustained pressure; the enemy was off his balance and we had to keep him in this plight. Having frustrated his attempts to establish a hinge in the Caumont-Vire sector, Second Army by its operations in the Thury Harcourt area on 4 August prevented the establishment of a hinge on the River Orne. The next essential was to smash the hinge south of Caen: and this was to prove a very difficult task.

I instructed First Canadian Army to make every effort to reach Falaise itself in the forthcoming attack; in the subsequent advance to the Seine the main Canadian axis was to be the road Lisieux-Rouen. On its right I intended Second British Army to advance with its right directed on Argentan and Laigle, whence it was to reach the Seine below Mantes. Twelfth United States Army Group was to approach the Seine on a wide front with its main weight on the right flank, which was to swing up towards

Paris. Plans for using airborne and air-portee forces to secure the Chartres area ahead of the main advance were to be held ready. As the eastward move progressed flank protection along the line of the River Loire was to be provided, particularly at the main crossing places of Saumur, Tours, Blois and Orleans.

THIRD PHASE: THE GERMAN COUNTER STROKE,
AND THE BATTLE OF THE MORTAIN-FALAISE POCKET

The arrival of 116 Panzer Division, 84, 89 and 363 Infantry Divisions and elements of 6 Parachute Division from north of the Seine, together with the reports of other formations on their way from that direction and from the south of France, indicated that the Normandy front was now taking priority over all others in the west of Europe; the enemy was reducing his Biscay and Mediterranean coast garrisons to a mere façade, while Fifteenth Army in the Pas de Calais was no longer to be organized in strength to meet a cross-Channel thrust. Divisions were being thrown straight into the Normandy battle rather than being positioned as a firm base upon which hard pressed formations of Seventh Army could regroup.

I have already stated that from the military point of view the enemy had reached the stage where withdrawal to the Seine offered the only hope of saving his armies; and personally I was surprised and delighted that he had not tried to do so already. Indeed he was even sending more troops into Normandy. Why?

The answer was now to be provided. The German High Command had by this time fully realized that the critical moment had arrived in Normandy, and that the outcome of the battle now raging would decide the issue of the struggle in western Europe and possibly even of the war itself. Refusing no doubt to believe the situation as it was presented to him, and disregarding the advice of his generals, Hitler himself ordered that the panzer divisions should be disengaged, formed up outside Mortain facing west, and launched into an attack which was to drive down the rivers See and Selune and reach the sea at Avranches, thereby restoring the old 'roping-off' line and severing the communications of Third United States Army whose advanced columns were even now beginning to cut across his own.

The following order signed by the Commander of Seventh Army, plainly reveals these facts.

"The Fuehrer has ordered the execution of a breakthrough to the coast to create the basis for the decisive operation

against the Allied invasion front. For this purpose, further forces are being brought up to the Army.

"On the successful execution of the operation the Fuehrer has ordered depends the decision of the War in the West, and with it perhaps the decision of the war itself. Commanders of all ranks must be absolutely clear about the enormous significance of this fact. I expect all corps and divisional commanders to take good care that all officers are aware of the unique significance of the whole situation. Only one thing counts, unceasing effort and determined will to victory.

For Fuehrer, Volk and Reich,
HAUSSER."

Even after the costly battles along the Odon a month before, Hitler could not, or would not, understand that armoured operations on such a scale must be secure from air attack. The Germans were playing into our hands by hurling against us the concentrated strength of their surviving armour in the west, most of which had already received a heavy battering and was tired and dispirited. Instead of reforming on a prepared line of defence, the enemy was exhausting his resources in a way which would give us the opportunity of defeating his Army west of the Seine and administering one of the greatest defeats of the war.

The German field commanders were under no illusion about the appalling risk of the Mortain counter stroke. We know, for example, that Dietrich, who took over Fifth Panzer Army during this operation, protested to von Kluge for over an hour about the impracticability of the Mortain attack. He pointed out that there was insufficient petrol; that if three armoured divisions were sent westwards it would be impossible to hold Falaise; that it was impossible to concentrate such a mass of tanks without inviting disaster from the air; that there was manifestly not enough space to deploy such large armoured forces; and that the Americans were already very strong to the south of Falaise so that such an attack would only serve to wedge the German forces tighter into the trap rather than to destroy the trap itself. To each argument von Kluge had only one reply, "It is a Fuehrerbefehl (Hitler's Order)."

Five panzer divisions—2 Panzer, 1 SS, 2 SS, 116 Panzer, and finally 10 SS as well—took part in the attack, together with 84 and 363 Infantry Divisions, which were both fresh.

It began on 7 August and the brunt of it fell on 30 United States Infantry Division which held the onslaught sufficiently long to enable two American divisions who were moving south between Avranches and Mortain to be switched to the danger area. Fortunately the weather was ideal for air operations and the

tremendous power of the Allied Air Forces was brought to bear against the enemy columns. All day they kept up their attacks and apart from the material damage caused, the intensity and continuity of the attacks undermined the morale of the enemy tank crews. Although they failed to do more than recapture Mortain, the Germans maintained their desperate efforts and continued to despatch reinforcements to the Mortain-Domfront area. On 8 August elements of 9 Panzer Division from the Mediterranean coast were identified and heavy pressure continued against VII Corps; but with the assistance of the Tactical Air Forces these attacks were also repulsed. On the ground, the American counter measures were swift and efficient, and the result of the battle was never for a moment in doubt.

Canadian Operations, 7-8 August

First Canadian Army was ready to launch its thrust southwards in the direction of Falaise on the night of 7 August. The object was to break the enemy defences astride the Caen-Falaise road, and to exploit as far as Falaise itself. The German defences were formidable; it was known that, during its period out of the line, 12 SS Panzer Division had been hurriedly preparing successive defence lines covering the approaches to Falaise. About sixty dug-in tanks and self-propelled guns were supplemented by some ninety 88 millimetre flak guns sited in an anti-tank role. The defence positions proper were manned by elements of 12 SS Panzer Division with 89 Infantry Division (newly arrived from north of the Seine) and 272 Infantry Division. Unlocated in rear was 85 Infantry Division, another Fifteenth Army formation.

The plan was to attack under cover of darkness after a preliminary action by heavy bombers; the infantry was to be transported through the enemy's zone of defensive fire and forward defended localities in heavy armoured carriers. These vehicles, which became known as 'Kangaroos', were self-propelled gun carriages specially converted for transporting infantry. To ensure accurate navigation by night the positions and bearings of thrust lines were fixed by survey from the leading tanks; directional wireless, Bofors guns firing tracer and 'artificial moonlight' were also employed to facilitate mobility in the darkness. Once the infantry had penetrated the forward enemy defended area, it was to debus and fan out in order to mop up the defenders.

The night attack was to break through the Fontenay-le-Marmion-La Hogue position and exploit to Bretteville-sur-Laize. The following morning armour was to tackle the defences along the line Hautmesnil-St Sylvain and to exploit towards Falaise.

At 2300 hours 7 August the heavy bomber operation began,

and half-an-hour later 2 Canadian and 51 Divisions with their armoured brigades moved forward. The assault was organized in eight columns of armour, each with vehicles four abreast, which advanced preceded by gapping teams of assault engineers and flail tanks. The enemy was greatly confused by these armoured columns driving through his defences. At first light the infantry debussed in their correct areas after a four miles drive within the enemy lines, and proceeded to deal with their immediate objectives. In rear of the advance other troops began mopping-up operations, which in fact proved to be a most difficult task.

By midday 2 Canadian Division had secured May-sur-Orne, Fontenay and Roquancourt, while 51 Division secured Garcelles Secqueville; soon afterwards Tilly la Campagne was taken.

The first phase of the operation had been successful, and following an attack by strong formations of Flying Fortresses, the armoured formations began to move south at 1355 hours. 4 Canadian Armoured Division on the right was held up eventually by an anti-tank gun screen, and on the left Polish Armoured Division was also unable to make much headway.

It was clear that the attack had come up against a very strong lay-back position astride the high ground from about Bray-en-Cinglais through Bretteville-le-Rabet to Poussy-la-Compagne.

Other Operations, 7-8 August

While VII United States Corps and 8 British Corps were held up in their respective sectors, the right wing of Twelfth United States Army Group proceeded with its planned operations. On 7 August XV Corps, in spite of opposition from 708 Infantry Division recently arrived from the Biscay front, continued to make progress and on the following day entered Le Mans.

In Brittany, Third United States Army units were engaged in heavy fighting at the approaches to St Malo, Brest and Lorient.

In the British sector, 43 Division finally secured Mount Pincon and some villages on the southern slopes, but heavy fighting continued and the enemy launched repeated counter attacks in which considerable casualties were inflicted by both sides. Meanwhile 30 Corps made progress towards Conde, while in the Orne bridgehead 59 Division was attempting to swing down on Thury Harcourt from the north-east; a series of strong enemy counter attacks by 12 SS Panzer Division on 8 August frustrated this plan.

The Situation, 8 August

I have shown that up to this period my plan was to make a wide enveloping movement from the southern American flank up

resistance to the initial advance but on 11 August progress was rapid, and while main bodies were some six miles south of the town, reconnaissance elements were in Alencon and beyond it. By the following day XV Corps was firmly established on the line Sees-Carrouges, and forward elements were converging on Argentan.

On First Army front operations were directed to driving in the enemy salient between Domfront, Mortain, St Pois and Vire; and on the Second Army sector conforming attacks were in progress towards Conde, Tinchebray and Flers. The enemy's attacks made no progress against VII Corps; on 10 August a major enemy attack north-west of Barentan was driven off and VII Corps continued to push forward. Farther north XIX Corps made some progress south-west of Vire where the enemy had thrown in 331 Infantry Division, recently arrived from the Pas de Calais on bicycles.

British and Canadian Operations, 9-12 August

The two main movements on the north of the enemy pocket comprised the converging movements of 8 and 30 Corps towards the Tinchebray-Conde area and the attacks of 12 Corps and First Canadian Army towards Thury Harcourt-Falaise. The enemy infantry opposing 8 and 30 Corps fought in the excellent defensive country with great stubbornness, and progress was therefore slow; 3 Division of 8 Corps crossed the Vire-Conde road about two miles east of Vire, while 30 Corps troops made some progress south from Mont Pincon towards Conde. By 12 August heavy fighting was continuing on the high ground three miles south-east of Vire, and at the same time leading troops were only a few miles short of Conde.

In 12 Corps sector, 53 and 59 Divisions advanced on Thury Harcourt astride the Orne; leading elements reached the outskirts of the town on 11 August and found it held. East of the river the bridgehead was extended to the south-east, and also to the north-east to link up with elements of 2 Canadian Division who had crossed the River Laize.

On 9 August Canadian Army made appreciable advances. 4 Canadian Armoured Division secured Bretteville-le-Rabet after bitter fighting, and the Poles captured Cauvicourt and St Sylvain. Repeated attempts, however, to make a clean break through the enemy's anti-tank gun screen met with little success and our armour sustained heavy casualties; in particular, it was obvious that the line of the River Laison had been developed into a strong defensive position.

While the armoured divisions were fighting astride the Falaise

road, the two infantry divisions completed the task of securing the corps flanks. On 11 August, 2 Canadian Division was ordered across the River Laize and by the afternoon of the following day had taken Barbéry, and linked up with 12 Corps. On the left flank, 51 Division cleared the woods and villages south of the Caen-Mezidon railway, and reverted to command of 1 Corps which took over responsibility for that area. In conjunction with 51 Division, 49 Division made progress and reached Vimont on 10 August; in this area elements of 344 Infantry Division from Fifteenth Army were identified.

The Situation, 12 August

After four days' fighting around Mortain, the enemy had suffered enough and began to pull back his panzer divisions to meet the threat to his flanks: particularly on the south, where hitherto protection had been afforded by inadequate battle groups. The enemy plan was evidently to extricate as many troops as possible, both panzer and infantry, from the salient and reform a north-south line much farther to the east. By 12 August reconnaissance reports clearly showed a general trend of enemy movement to the east from the Mortain area through the 'neck' between Falaise and Argentan and on towards the Seine ferries. But the enemy was still fighting back hard and apparently trying to stand his ground within the salient; it was reasonable therefore to assume that this movement comprised the rearward elements of the German forces, and that if we could close the jaws of our 'short' enveloping movements across the Falaise-Argentan neck, we should have in our grasp the bulk of the fighting formations of von Kluge's forces. The Allied Air Forces were pounding the enemy in the pocket but the problem of completing the encirclement was no easy one; the Germans realized that their existence depended on holding open the corridor, and bitter fighting ensued as a result of our attempts to frustrate them. On the north side of the corridor it must be recalled that the enemy had long been in possession of the vital ground north of Falaise, and had thus had ample opportunity for the development of strong, well sited defences; the large number of 88 millimetre guns which had previously defended the Caen area in the anti-aircraft role, were now taking heavy toll of our armour north of Falaise. On the south side of the corridor the enemy piled his resources not only to oppose XV United States Corps, but ultimately to launch an endeavour to break our cordon in that area.

There was no change in my orders or intentions. I was watching carefully the mounting of the 'wide' envelopment around to the Seine, and kept plans ready for dropping airborne forces in the

Paris-Orleans gap. It was essential from my point of view to continue with the wide envelopment movement, concurrently with closing the Falaise-Argentan corridor, as we wanted to round up those enemy formations which were outside the actual Mortain pocket; we wanted to make certain of writing off all the Germans in the Normandy battle. General Bradley therefore carried out further regrouping in Third United States Army, so that General Patton could continue his drive to the Seine while the battle of the 'neck' continued. The major difficulty was administration, since the maintenance of the southern American wing from the original beach areas had to be effected along a long and badly damaged line of communication, which passed through the congested Avranches area and made a wide sweep southwards and eastwards. Very great credit is due to the American administrative machine, greatly assisted by rapidly developed air supply arrangements, for the outstanding administrative improvisation and ingenuity which enabled us to continue offensive operations on our southern flank.

Operations, 13-20 August

The battle of the Mortain-Falaise pocket continued with undiminished ferocity. While strenuous efforts continued to close the corridor between Falaise and Argentan, British and American forces pressed in from all sides of the pocket to annihilate the enemy which it contained. XV United States Corps was well established in the Argentan area on 13 August and had elements some ten miles to the east towards Gace, feeling for the enemy flank and closing on the routes to the east; on 14 August this Corps was ordered to extend yet further to the east towards Dreux in order to get round the enemy holding the southern shoulder of the corridor and to prevent leakage of the enemy forces towards the Orleans gap.

VII United States Corps advanced north from Mayenne to positions on the western flank of XV United States Corps; as this movement was in progress the enemy made a determined but unsuccessful effort to break out of our cordon in the area of the Forêt d'Ecouvès.

Meanwhile V and XIX United States Corps pressed in on the extreme western and north-western sectors of the pocket; by 14 August XIX Corps had fought its way into Domfront and troops of V Corps were within two miles of Tinchebray. 8 Corps, of Second British Army, was closing in on Tinchebray from the north, and 30 Corps pushed the enemy back on Vassy, Conde and the River Noireau. East of the Orne, leading troops of 12 Corps were now about six miles to the west and north-west of Falaise.

The main Canadian thrust on Falaise from the north was resumed on 14 August, when it was planned to by-pass the resistance astride the main road and come down on the town from the north-east, after breaking through the enemy positions on the River Laison. By the end of the day an advance of some five miles had been made and the Canadians were only four miles short of Falaise itself.

By 15 August it was quite clear that the enemy intended to evacuate his armour from the pocket and to withdraw, regardless of the infantry, east of the Falaise-Argentan area. Although the opposition in the west of the salient lessened considerably, fighting on the flanks of the corridor was fierce, as the Germans exerted every possible effort to hold open a line of escape for their forces. The enemy was becoming very disorganized; elements from no less than eleven different divisions had been identified near Argentan on 14 August. The same day saw very heavy fighting on VII United States Corps front in the area of Rannes, and XIX Corps on its left was having difficulty with stubborn rearguards to the north-east of Domfront. V United States Corps captured Tinchebray from the west as Second Army troops came in from the north; 30 Corps made progress astride Conde, and 12 Corps drove in closer to Falaise. 4 Canadian Armoured Division made progress east of the Caen-Falaise road and the Polish Armoured Division secured bridgeheads over the River Dives some six to ten miles north-east of Falaise. Farther north, 1 Corps was thrusting towards St Pierre-sur-Dives.

Meanwhile Twelfth United States Army Group continued to develop the wide encircling movement to the Seine. The plan was to line up Third United States Army facing east, and to develop its operations on three main axes directed on Dreux, Chartres and Orleans. At the same time First United States Army was to face north along the southern flank of the pocket and to complete its reduction in conjunction with the British and Canadian forces. Headquarters V United States Corps, when pinched out in the Tinchebray sector, was to take over from Headquarters XV Corps in the Argentan area. The Third Army drives were to be conducted by XV Corps to Dreux, by XX Corps from Le Mans to Chartres and by XII Corps to Orleans along the north bank of the Loire. General Bradley also ordered XIX United States Corps, when pinched out of the Mortain area, to be swung round to join the drive to the Seine. The limiting factor remained administration, yet on 15 August General Patton's troops were only some five miles short of Dreux, and ten miles short of Chartres. On 16 August elements of XII Corps liberated Orleans, and on the same day XX Corps entered Chartres. Twenty-four hours later Dreux was captured by XV Corps. The speed of these three thrusts was such

that there was no call for the employment of airborne forces ahead of the Third Army troops. Between 17 and 20 August, XII United States Corps became established to the north-east of Orleans, while XX Corps reorganized in the Chartres area pending additional maintenance resources for the continuance of their advance.

The movement continued with the swing of General Patton's northern flank up to the Seine from the Dreux area. Orders were issued on 17 August directing XV Corps to the Seine about Mantes Gassicourt. The supply situation made it impossible to maintain major forces east of Dreux, but by 19 August (D+75) 79 United States Division had secured a small bridgehead over the Seine a few miles below Mantes. Elsewhere patrols had pushed to within a few miles of the suburbs of Paris, and reported the general area full of small and disorganized bodies of Germans moving towards the capital. On 19 August, maintenance conditions permitted Twelfth United States Army Group to order an advance along the southern bank of the Seine by both XV and XIX Corps on a frontage running from Mantes to Dreux and Verneuil.

Meanwhile the battle of the pocket continued; but by 16 August it had diminished considerably. 30 Corps secured Conde and continued its thrust towards the Orne. 12 Corps made further progress and finished the day just short of the Falaise-Conde railway, while troops of First Canadian Army virtually surrounded Falaise. On the south side of the enemy's corridor fierce fighting continued in the Argentan-Briouze sector.

On 17 August, Second Army troops advanced seven miles east of Flers, and on their right were in contact with VII United States Corps in the Briouze sector. Advancing south-east from Conde we were across the River Noireau on a broad front, and 12 Corps troops also made progress in the sector to the west of Falaise. Meanwhile 2 Canadian Division cleared Falaise, to the east of which 4 Canadian Armoured Division advanced on Trun, crossing the River Dives near Morteaux. On its left, Polish Armoured Division advanced its right flank to within a mile of Trun but was experiencing fierce fighting about Champeaux, four miles to the north.

On the north side of the corridor the most desperate action on 18 August was in the Chambois area. Here the enemy was making an attempt to retrieve the situation by attacking towards Chambois with fresh troops newly arrived in Normandy. Meanwhile V United States Corps struck north towards Chambois from the Argentan sector, in a bid to link up with the Polish and Canadian thrusts. On the western sector of the pocket the resistance was crumbling; 30 Corps troops reached Poutanges and Ecouche, while further advances were made by 12 Corps.

On 19 August the neck of the pocket was finally closed when American troops from the south linked up at Chambois with the Polish Armoured Division. On this day, 4 Canadian Armoured Division captured St Lambert-sur-Dives and held it in face of desperate enemy attacks; the Polish Armoured Division experienced equally hard fighting. In the difficult tank country south of Les Champeaux, both armour and infantry detachments fought a confused battle with Panzer elements attacking from the east, south and west in a desperate attempt to keep open a narrow passage for escape. By midday, Ecorches had been captured and Polish tanks were in the area Coudehard-Mont Ormel. The Poles captured Chamboise at 1900 hours, about which time contact was established with V United States Corps.

On the night of 19 August the general situation showed that we had in Trun, and to the north of it, 3 Canadian Infantry and 4 Canadian Armoured Divisions, with a small force of tanks and infantry gallantly holding St Lambert-sur-Dives on the road to Chambois. Polish Armoured Division was in Chambois and the area of Coudehard and Ecorches. From Chambois to Argentan V United States Corps had two infantry divisions and one (French) armoured division. In Argentan and extending to Bailleu on the Argentan-Trun road, was 11 Armoured Division of 30 Corps with 50 Division clearing the area further west. To the north, 53 Division of 12 Corps was closing on the Bailleu and Trun area from the west.

At the beginning, the German forces inside the pocket had retained a semblance of cohesion and plan: the panzer divisions concentrated near the neck, where Allied pressure was strongest, in order to try and keep it open while the infantry divisions, notably the parachutists, conducted a rearguard action as best they could. By 16 August, however, almost all cohesion had been lost: divisions were hopelessly jumbled up and commanders were able to control no more than their own battle groups. Batch after batch of prisoners contained members of a dozen different divisions. The wreckage of German transport and equipment as a result of our air attacks littered the countryside. The Allied Air Forces were presented with targets probably unparalleled in this war: aircraft formations were engaging endless columns of enemy transport packed bumper to bumper and rendered immobile by the appalling congestion. While there were some attempts by the enemy to break out in formed detachments, there were in all sectors small parties of Germans trying to infiltrate across the fields to safety, and the problem of rounding them up was very considerable.

On 20 August the enemy made his last co-ordinated attempt at forcing our cordon. Fifth Panzer Army was ordered to make

a gap; elements from 9 SS, 10 SS and 21 Panzer Divisions, which were outside the pocket, attacked from the north towards Trun and Chambois, while from inside, detachments of 2 SS, 116 and 9 Panzer Divisions tried to break out towards the east. The attack was contested by the Canadians and Poles, who inflicted tremendous casualties on the enemy, and it seems unlikely that the enemy succeeded in getting any great number of tanks out of the pocket. After this attack, the battle of the Mortain-Falaise pocket was virtually at an end, though the process of mopping up took some time.

At the same time I was endeavouring to develop operations eastward from the 1 Corps sector on our extreme northern sector. On 16 August I had directed First Canadian Army to mount a thrust towards Lisieux. General Crerar gave this task to 1 Corps, to which 7 Armoured Division was transferred from the Conde area. 51 Division captured St Pierre-sur-Dives and had advanced two miles beyond the town on 16 August, while 49 Division crossed the Dives at Mezidon. Nearer the coast, 6 Airborne Division found the enemy holding firm along the river, which constituted a difficult obstacle. By the night of 20 August we had crossed the River Vie on a broad front; 7 Armoured Division secured Livarot, and on the Lisieux road 51 Division reached St Julien-le-Faucon with 49 Division on its left. 6 Airborne Division was still engaged in the marshlands of the Dives valley, and in Cabourg was having difficulty in reducing the enemy defences.

The Situation, 20 August

The enemy situation in France was now desperate.

Our first enveloping movement completed, I was concentrating on ensuring that the wider encirclement along the Seine should be achieved with the maximum possible speed, so as to cut off the survivors from the Falaise-Mortain pocket.

There was little enough that the enemy could do; he had realized the inevitable fate of Seventh Army too late, so that the formations of Fifteenth Army, and those arriving from the south of France, had become involved in the battle piecemeal and had merely served to increase the numbers of our victims. By 20 August, the garrison of the Pas de Calais, once so strong, had been reduced to three divisions, while there was only one division in Flanders and one in the Somme-Seine sector.

Meanwhile, on the Mediterranean coast Allied forces had started landing on 15 August by sea and air between Toulon and Cannes. The German Nineteenth Army, which controlled the nine divisions remaining on the Riviera, began to withdraw in the face of these landings, but, owing to its own immobility, it

attempted to delay as much as possible the advance of the United States Seventh Army up the Rhone Valley.

Speed, then, was now the vital necessity, in order to take advantage of the favourable circumstances presented to us: first, we had got to block the withdrawal of enemy survivors across the Seine, and second, we were to drive quickly across the Pas de Calais to capture ports to facilitate our maintenance requirements, and the flying bomb sites in order to diminish the effects that the 'V' weapons were having on the United Kingdom.

In my orders of 20 August I gave as my intention the completion of the destruction of enemy forces in north-west France, and the preparation for an advance northwards in order to destroy the enemy forces in north-east France.

First priority was to be given to clearing up the Mortain-Falaise pocket. It was essential to maintain the cordon until all the enemy forces had been destroyed or rounded up. As soon as this had been completed 21 Army Group was to form up facing east in order to drive with all possible speed to the Seine. This requirement was a complicated manoeuvre, as it involved swinging back First Canadian Army to the north, leaving the axis Falaise-Bernay-Louviers available for Second Army. It was also my intention to give Second Army another axis, running from Argentan through Evreux to Vernon, which was to involve withdrawal across its front of the Americans who were sweeping down the left bank of the Seine.

While waiting for the redistribution of British and Canadian forces, and their drive to the river, the advance from the Mantes Gassicourt-Dreux-Verneuil area along the south bank of the Seine was to continue, with the object of establishing with maximum speed forces to block the escape routes to the river ferries. As soon as the British and Canadian troops got forward to their sectors on the Seine, the American forces on their front would withdraw within the Twelfth Army Group boundary. Twelfth Army Group was to assemble its right flank to the west and south-west of Paris; it was the Supreme Commander's intention that Paris should be captured when General Patton considered that a suitable moment had arrived, and not before; it was important not to attempt to secure the capital until it was a sound military proposition.

On 20 August it was the intention that the subsequent advance of Twelfth United States Army Group would be to the general area Orleans-Troyes-Chalons-Reims-Laon-Amiens: on its left, Second British Army was to advance to the Somme between Amiens and the sea, while Canadian Army would cross the Seine about Rouen and tackle the Havre peninsula. I wanted to secure the port of Le Havre as quickly as possible, and also Dieppe; it was appro-

priate that 51 Division was on the northern flank and available for the capture of St Valery, and I had no doubt that General Crerar would arrange for 2 Canadian Division to deal suitably with the enemy in Dieppe.

THE FINAL PHASE: THE ADVANCE TO THE RIVER SEINE AND THE LIBERATION OF PARIS

The formations of Twelfth United States Army Group advanced to the Seine as maintenance conditions permitted. On 21 August, XII United States Corps liberated Pithiviers and crossed the River Loing on the following day. Montargis was occupied and forward troops reached Sens on the River Yonne. On the southern flank Auxerre was reached, while elements pushed forward to Troyes on the Seine.

On 22 August, XX United States Corps resumed its advance from the Chartres area towards Etampes and Rambouillet. The following day this Corps crossed the Seine in the area of Fontainebleau and Melun and was then directed to the Marne about Reims.

XV United States Corps wheeled to the north-west along the left bank of the Seine, while 79 Division extended its bridgehead at Mantes Gassicourt. By 24 August, Heudebouville was reached, only some five miles short of Louviers. At the same time, XIX Corps, on the left of XV Corps, attacked north from the Dreux-Verneuil area on 20 August. The towns of Nonancourt and Verneuil were liberated on 22 August, and Evreux was reached on the following day. The advance continued rapidly across the front of Second British Army, and on 25 August Elbeuf was reached; in this area considerable fighting was experienced, since enemy forces were trying desperately to keep open routes from the Foret de la Londe to the ferries at Rouen. Meanwhile troops of First Canadian Army reached the area and began to relieve the Americans. The enemy was in great confusion in the Foret de la Londe. The American drive along the south bank of the Seine had deflected enemy survivors making for the river ferries further and further to the north, so that there became a great concentration of enemy vehicles and personnel in the sector between Rouen and the sea.

It was General Bradley's intention to take Paris by crossing the Seine astride the city and encircling it; it was hoped in this way to avoid fighting within the city itself. The rising of the Resistance Movement in the capital brought matters to a crisis, however, and the Supreme Commander ordered troops to enter the city before the encircling movements were completed. V United

States Corps, having been relieved at Argentan by 30 Corps, was directed to Paris from the west; the advance was led by 2 French Armoured Division. Considerable resistance was met in the Versailles area and at the western exits from Paris itself, but on 25 August French troops entered the city and the German commander surrendered to General Leclerc. The French Armoured Division was followed by an American formation, for there was a considerable amount of clearing up required.

Second Army advanced to the Seine with 30 Corps on the right and 12 Corps on the left. The former was directed to the sector Mantes-Vernon, and the latter on Les Andelys-Louviers. On 20 August, 30 Corps began to pass through the American troops north-east of Argentan, and on the following day 11 Armoured Division by-passed resistance in Gace and reached Laigle twenty-four hours later. Meanwhile 50 Division came up on the left of 11 Armoured Division and on 23 August reached the area Verneuil-Breteuil. Here the advance was halted as XIX United States Corps was moving across the front in its drive towards Elbeuf.

12 Corps started from the Chambois area and met no opposition to its advance except from extensive demolitions and mines. By last light 23 August, armoured car patrols were in Bernay, and 15 Division, which was to force the Seine at Louviers, had concentrated south-west of Le Neubourg by 25 August. On the following day this division passed across the axes of XIX United States Corps and reached Louviers preparatory to crossing the river on the following day.

Since the time that it had been pinched out in the Flers sector, 8 Corps remained grounded while its transport was taken to assist in the advance to the Seine.

First Canadian Army moved east with 2 Canadian Corps on the right, directed on Rouen, and 1 Corps on the left directed on the lower reaches of the river.

The Polished Armoured and 3 Canadian Divisions were left to complete operations in the pocket, while the remainder of 2 Canadian Corps reached the River Touques on 22 August; there was considerable fighting round Orbec but by 24 August Bernay had been reached and a bridge over the River Risle seized at Nassandres. Contact was made with XIX United States Corps in the general area Elbeuf and Canadian troops took over the battle that was ranging round the Forêt de la Londe.

The advance of 1 Corps was delayed by considerable opposition round Lisieux, but 7 Armoured Division passed through the southern outskirts of the town on 22 August. On their left, 49 Division crossed the Touques south of Pont L'Eveque, at which place 6 Airborne Division was involved with German rearguards.

On the coastal sector the Belgian Brigade (under command 6 Airborne Division) reached Deauville. 1 Corps advance continued slowly, since the enemy forces on their front had not been involved in the Falaise debacle, and were conducting a planned and orderly withdrawal, leaving considerable demolitions, obstacles and mines in their path. By 24 August, however, the pace of the advance quickened. On the right, St. Georges du Vivre was captured and patrols were approaching Pont Audemer on the River Risle. After clearing Pont L'Eveque, 6 Airborne Division advanced ten miles to the river Morette together with the Royal Netherlands Brigade. On 27 August the Corps was nearing the river between the Foret de la Londe and Quillebeuf, and the task of clearing the Foret de Bretonne and the bends in the river was undertaken.

The Allied Air Forces throughout the drive to the river had carried out relentless attacks against the ferries which provided the only means of escape to the enemy. During the last days of August considerable bodies of enemy were still sandwiched against the river in the bends and forests between Elbeuf and the sea. They made desperate attempts to hold perimeter lines, while the ferries endeavoured to continue operation in spite of day and night attacks from the air. The most successful air action was carried out at Rouen where an enormous conglomeration of enemy fighting vehicles and transport was jammed round the ferry quay. Subsequent survey of the area revealed destruction second only to that in the Falaise-Mortain pocket.

In spite of everything, the Germans in fact managed to get a very considerable proportion of their surviving manpower away to the north of the river. Some sixty main ferries were employed across the Seine, in addition to boats and rafts of all kinds. But because the Allied Air Forces had destroyed every bridge between Paris and the sea, and had successfully kept them out of operation, the amount of equipment that the enemy lost was staggering.

OPERATIONS IN BRITTANY

Meanwhile VIII United States Corps continued its operations in the Brittany peninsula. In early August efforts were concentrated on reducing St Malo and Dinard, but some delay was experienced owing to the shortage of ammunition. On 11 August, infantry units entered the old part of the town of St Malo but the enemy held out in the citadel until 14 August and in the harbour forts for several subsequent days; by 18 August, with the exception of Cezembre Island the defences of St. Malo and Dinard were finally reduced. By 20 August, Brest and Lorient had been completely surrounded; attacks to reduce the Brest fortress were

launched on 26 August and the Plougastel peninsula was soon cleared, but the city continued to hold out. The enemy defenders of the ports had received very precise instructions from the High Command as a result of which they continued to resist with stubborn and bitter intensity our efforts to capture them. At the same time the demolition of port facilities was carried out in a most thorough manner, so that it was evident that when at last the harbours fell into our hands we were going to be confronted with major clearance problems before use could be made of them.

CHAPTER TEN

Review of the Battle of Normandy

WITH the gradual clearance of the Mortain-Falaise pocket and the lining up of the Allied armies on the Seine, the extent of the crushing defeat suffered by the Germans in Normandy became apparent.

The enemy losses in manpower were not far short of half a million men; 210,000 were prisoners in our hands and the figures for killed and wounded were estimated at about 240,000. Material losses were equally severe; some 3,500 guns and 1,500 tanks were captured or destroyed, together with a vast amount of mechanical transport, horse transport and equipment of all kinds.

A total of forty-three enemy divisions had either been eliminated or severely mauled, apart from the formations isolated in the Brittany ports and the Channel Islands. Of the Army, Corps and Divisional Commanders, twenty had been killed or captured and two others wounded; the Supreme German Commander had been changed twice.

The outstanding point about the Battle of Normandy is that it was fought exactly as planned before the invasion. This plan had been relentlessly followed in spite of the inevitable delays and minor setbacks which the changing course of the battle had imposed upon us, and had brought us finally to overwhelming victory. The measure of our success was, in the event, far greater than could ever have been foreseen, because of the faulty strategy of the enemy. Hitler's personal intervention in the direction of the battle provided us with opportunities we were not slow to exploit; he refused to face the only sound military course open to the Germans at the end of July, which would have involved staging a withdrawal to the Seine barrier and with it the sacrifice of north-western France. Instead he decided to fight it out between the Seine and the Loire, and thus committed the first vital error the Germans made in the campaign. As a result the Allies had caused the enemy staggering losses in men and material, and won a victory which ended the German domination of France; the repercussions throughout Europe (and indeed the world) were of first importance to the Allied cause, as the peoples of the occupied countries saw at long last real grounds for hope of speedy liberation, and the world became inspired with confidence in the power of Allied arms to overcome and defeat the Wehrmacht.

I have made it clear that in planning to break out from the

bridgehead on the western flank, a prerequisite was the retention of the main enemy strength on the eastern flank. The extent to which this was achieved is well illustrated in the following table, which shows the estimated enemy strength opposing us in the eastern and western areas of our front during June and July:

	Estimated enemy strength opposite Caumont-Cotentin sectors			Estimated enemy strength opposite Caumont-Caen sectors		
	Panzer Divisions	Tanks	Infantry Battalions	Panzer Divisions	Tanks	Infantry Battalions
15 June	—	70	63	4	520	43
25 June	1	190	87	5	530	49
30 June	$\frac{1}{2}$	140	63	$7\frac{1}{2}$	725	64
5 July	$\frac{1}{2}$	215	63	$7\frac{1}{2}$	690	64
10 July	2	190	72	6	610	65
15 July	2	190	78	6	630	68
20 July	3	190	82	5	560	71
25 July	2	190	85	6	645	92

This result was achieved by the retention of the initiative and by very hard fighting, which enabled us to expand our territorial gains in the west and to engage and wear down the enemy strength along the whole of the Allied front. We never had to conform to enemy thrusts, and were able to remain firm and balanced until we were at last ready to stage the break-out operation. During this period the enemy was forced to commit his reserves in piecemeal fashion in order to splice the cordon with which he tried to rope us off in the bocage country. The maintenance of the threat to the Pas de Calais immobilized meanwhile very considerable enemy forces, and reserves which were despatched to Normandy had to run the gauntlet of the splendid action of the Allied Air Forces, making use of circuitous and uncertain routes owing to the interdiction of roads and railways throughout western Europe, and particularly over the Rivers Seine and Loire.

The mounting of the break-out operation suffered considerable delays. One of the main reasons was the weather, which not only upset the schedule of our beach working, causing delay in the arrival of troops and stores, but also hampered the action of the air forces. A good example of the latter effect was the week's delay between 19-25 July until conditions were suitable for heavy bombers in the Periers-St Lo sector. The high quality of the enemy reserve divisions, coupled with the ideally defensive nature of the bocage country, was another delaying factor, and it must be remembered that the original assault and follow-up divisions were getting very tired by the beginning of July: though there was no opportunity of relieving them.

We also found the development of the bridgehead to the

south-east of Caen a slow and difficult matter, I have shown, in discussing the plan, that the Air Forces were anxious to expand our territory rapidly into the good airfield country, and that I had undertaken to do this as soon as conditions permitted. In the event it became impossible to meet this requirement without altering the whole strategy of the battle: and this I was not prepared to do. The Allied Air Forces had achieved a remarkable degree of air superiority over the bridgehead, and the provision of air support was of the highest order; on the other hand the success of the plan involved pulling the enemy's reserves against our eastern flank, and this was achieved to such a degree that in spite of all our efforts it was impossible to make rapid headway in the sector which the enemy obviously regarded as the most vital.

There was a period, after we had secured our bridgehead, when criticism began to appear in the Press on both sides of the Atlantic, as a result of what was termed 'the danger of a stalemate in Normandy'; there were those who found our progress slow and who foresaw the failure of our operations to force a break-out from the bridgehead. There was indeed a stage when the progress of operations was not as fast as had been hoped, but it has been seen that I had given D+90 as the target date for being lined up on the Seine, and that in fact the first crossing of the river was made on D+75. That there were critics who became despondent and lacking in confidence at a time when well laid plans for victory were maturing satisfactorily is understandable, because they could not be given, for obvious reasons, the basic design within which those plans were being executed.

When at last the break-out operation was delivered, it carried all before it. Initially my intention was to push the enemy back against the Seine, closing meanwhile, with all possible speed, the escape routes through the Paris-Orleans gap. I had not reckoned on Hitler's fling at generalship, and when it was realized that the Germans were concentrating against Avranches, I ordered an inner envelopment through Falaise and Argentan. At this stage the important thing was to conduct enveloping movements concurrently, so that the enemy who escaped from the one, would be rounded up in the other.

It took time to close the Falaise-Argentan corridor, and some enemy escaped us there; but the degree of resistance was desperate in the extreme for the Germans realized full well that holding open the neck of the pocket was vital to their withdrawal. The Allied problem was made more difficult by the relative paucity of routes, because movement was made across the main road axes, and also by the great congestion, which was aggravated, as the enemy retreated, by the mass of German transport and equipment which littered the countryside.

The major difficulty in the wider envelopment to the Seine was administration. The American forces were being maintained from Cherbourg and the beaches, and transport echelons had to pass through the congested Avranches bottleneck, close behind formations which were resisting the German counter stroke. The actual rate of progress was therefore an outstanding achievement, which was greatly facilitated by delivery of stores by air.

Once the Mortain-Falaise pocket was sealed, it became essential to get the British and Canadian armies up to the Seine as rapidly as possible, but this was a much more difficult matter than is at first sight apparent. It was necessary to re-adjust the axes of formations which had been converging on the Falaise area, to the routes running east and north-east to the Seine: a process which involved inevitable congestion and delays on roads damaged, mined and littered with derelict enemy vehicles. Moreover, the advance eastwards was opposed by organized enemy formations which had not experienced the fighting in the pocket, and which were therefore able initially to stage an organized withdrawal.

It has not been possible in this account of the Battle of Normandy to make more than passing reference to the tremendous achievements of the Allied Air Forces. They maintained complete air supremacy over the battle area, so that finally the enemy became virtually immobilized during the hours of daylight. The interdiction programme, particularly on the line of the Seine and Loire, isolated the Normandy battlefield, and greatly hampered the enemy's reinforcement and supply arrangements. The results of the strategic bombing offensive were apparent in the battle, for the enemy's lack of oil reduced the mobility of his formations and thus added further difficulties to the problems confronting the High Command. It has been seen that in addition to the part played by the Tactical Air Forces in direct support of land operations, heavy bombers were employed on the immediate battlefield with devastating results.

The outstanding administrative problems in Normandy arose from the unfavourable weather conditions, which resulted in the tonnage of stores landed over the beaches being 25 per cent. less than had been planned throughout the early stages; from the difficulty of expanding the major maintenance installations rapidly from the beaches into the confined area of the bridgehead; from the great traffic congestion within the bridgehead; and from the sudden change from intensive short-range operations to the fast moving battles up to the Seine and beyond.

Initially the armies were supplied from hastily stacked dumps on the beaches; within fifty days the vast and complicated organization of the Rear Maintenance Area had been brought into

being. The degree of the expansion is reflected in the fact that in the British sector alone on D-day 8,900 vehicles and 1,900 tons of stores were landed, while by D+50 631,000 personnel, 153,000 vehicles and 689,000 tons of stores had been handled in the bridge-head as well as 68,000 tons of bulk petrol, oil and lubricants.

Difficulties occurred in beach working owing to shortage of ferry craft, and to the fact that anchorages, except for shallow draft shipping, were some distance offshore. Shortage of ferry facilities arose from the rough sea conditions in which the specially constructed 'Rhino' ferries proved of little value, and from the losses due to bad weather. It therefore became necessary to beach for discharge landing craft, and even tank landing ships, in order to speed up unloading.

Amphibious lorries (Dukws) proved of outstanding value in discharging cargoes.

The storm of 19-22 June caused very grave dislocation of our beach working arrangements. Some eight hundred craft of all types were damaged or driven ashore, and the Mulberries were also seriously damaged. Except to a very limited extent inside the Gooseberries, unloading came to a standstill, and it has been estimated that the overall unloading loss caused by the gale was in the neighbourhood of 20,000 vehicles and 140,000 tons of stores. The Mulberry in the Omaha area was so badly damaged that further construction was abandoned, and resources were diverted to the Arromanches Mulberry: which was speedily completed.

The congestion of transport in the bridgehead was immense. At one check post 18,836 vehicles passed in one day, giving an hourly average of 785 vehicles, or one every four seconds throughout the twenty-four hours. Road repair, traffic control, and the construction of diversions became a major commitment.

Mention has been made of the shortage of ammunition which occurred owing to unloading delays. This problem was solved by ordering selective discharge of ships; in particular, ships carrying field ammunition were given top priority for unloading. At the same time, petrol and oil shipments were reduced in order to provide more space for ammunition; it is invariably found that the expenditure of petrol, oil and lubricants rises and falls in inverse ratio to ammunition requirements; we had built up large reserves of the former and could now concentrate on the latter.

The British assault troops landed with two twenty-four hour ration packs, while the Americans carried K rations. Thereafter fourteen-man 'Compo packs' were used, until, towards the end of July, the normal Field Service Ration was introduced. This was wholly a preserved ration except for bread, which became available in limited quantities from the beginning of July.

Ordnance stores were landed in special packs, initially designed

to contain sufficient reserves for a brigade group or its equivalent for thirty days. Subsequently, larger packs scaled for thirty day's requirements of a division were used; they weighed 500 tons each.

The Medical Service evacuated casualties and seriously sick cases to England during the initial stages. Air evacuation began as early as 13 June and worked with pronounced efficiency throughout.

The local administration of the dumps in the bridgehead was taken over on D+5 from Second Army by the Headquarters of a Lines of Communication Area, and in mid-July Headquarters Lines of Communication itself assumed responsibility for co-ordination and administration of the rear areas. Shortly after Headquarters 21 Army Group assumed full administrative control. In the event, it might have been preferable to have brought in Rear Headquarters of the Army Group earlier, in order to avoid the difficulties of so many changes of responsibility.

As operations in the beachhead continued into July, the problem of lack of port facilities became more pressing. Experience at Cherbourg showed that clearing captured ports was going to constitute a lengthy and major undertaking; the breaks in beach working under autumn conditions were likely to become more frequent, and the urgency of securing the Brittany ports in time to get them working before weather conditions further deteriorated was apparent. Although circumstances subsequently caused an alteration in our dependence on the Brittany ports, in early July they were of first importance in our administrative planning. Meanwhile the stocks in the Rear Maintenance Area were being increased at full pressure in order to provide a cushion for emergencies in the future.

At the end of July, the rapid change over to mobile conditions resulted in speedy administrative arrangements to meet the changing requirements of the Armies.

Additional transport units, which had been held back in the United Kingdom, were now called forward, and the import of stores and reserves was reduced in order to free more transport for clearing loads from the administrative centres to the forward troops. As the advance gained momentum the transport in rear areas was progressively cut, and some lines of communication units were grounded in order to increase resources for sustaining operations.

By the time the Armies began to close to the River Seine, it was evident that the administrative machine was to be faced with a prolonged and rapid pursuit, and it will be seen that major maintenance risks had to be taken in order to maintain the momentum of the advance.

CHAPTER ELEVEN

The Development of Allied Strategy North of the Seine

THE Supreme Commander decided that he would take over direct control of the land battle from 1 September. Twelfth United States Army Group would then no longer be subject to my operational control.

As the Allied Armies drove to the Seine the problem of the future conduct of operations against Germany was being resolved. During the period 23 August–12 September I discussed at length with General Eisenhower the future plan of campaign.

At the end of August the current appreciation of the enemy's capabilities suggested that German resistance in western Europe was on the verge of collapse. It was thought that north-west of the Ardennes the enemy disposed two weak Panzer and nine infantry divisions, which were in full retreat and therefore unlikely to offer strong resistance provided they were given no respite. South of the Ardennes enemy forces were estimated at two Panzer Grenadier and four weak infantry divisions. Heterogeneous German forces were withdrawing from south-west France but had only minor fighting value, while, in the Rhone valley, Allied forces were driving northwards the equivalent of half a Panzer division and two infantry divisions. In such circumstances it was obvious that the enemy would have to produce fresh divisions from other fronts, and from Germany, if he were to succeed in preventing our advance into the Reich; the dependence of his war potential on the industrial areas of the Ruhr and Saar suggested that he would concentrate his available resources in defending them. His preoccupation with "V" weapon sites in Flanders added to the possibility that he would allocate the preponderance of his available resources to the north. It was reckoned (on 22 August) that he would allot about sixteen divisions to the northern sectors of the front, leaving the remainder to delay the American advances towards Metz.

How best could we exploit this situation to finish the German war as quickly as possible?

My own view, which I presented to the Supreme Commander, was that one powerful full-blooded thrust across the Rhine and into the heart of Germany, backed by the whole of the resources

of the Allied Armies, would be likely to achieve decisive results. Success in such a plan would have been, to my mind, dependent upon our ability to concentrate sufficient strength, supported by adequate administrative resources, to ensure the maintenance of the momentum from the time we crossed the Seine. The project therefore involved calling upon combined Allied resources in the widest sense, and would have entailed reverting sectors of the Allied front to a purely static role.

There appeared to be two feasible axes along which such a thrust into Germany could be mounted. The first was the northern axis through Belgium to the Rhine, crossing the river north of the Ruhr industrial region; once over the Rhine, this route led into the open plains of northern Germany. The alternative axis was through Metz and the Saar area, leading into central Germany.

I favoured the northern route since it would enable us to exploit our greatly superior mobility and strength of armoured forces in the plains of northern Germany, with greater effect than would be possible in the more difficult southern country. The development of this plan would logically fall into certain stages, and it is very important, in order to understand the subsequent development of the campaign from the 21 Army Group point of view, to be quite clear what these stages were.

In my view, once we had crossed the Seine the major problem confronting the Allies was getting over the Rhine. This great waterway formed an obstacle of tremendous military value, and I considered that the necessity for establishing bridgeheads on its eastern bank was a factor of overriding importance in our plans for finishing the war. If we could maintain the strength and impetus of our operations beyond the Seine sufficiently to keep the enemy on the run straight through to the Rhine, and 'bounce' our way across that river before the enemy succeeded in reforming a front to oppose us, then we should achieve a prodigious advantage. If, on the other hand, we were to give the enemy sufficient respite to enable him to organize a cohesive front to oppose our advance and to check our progress, we might well become involved in a heavy 'dog-fight' west of the Rhine obstacle, the effects of which, combined with the advent of winter weather, might well hold us up until the spring of 1945. Moreover, should the enemy once establish a proper defensive system based on the Meuse and the Rhine, we should be involved in an opposed river crossing operation of the first magnitude: which would inevitably take time and prove costly in lives and material.

Assuming we should succeed, by the concentration of our resources, in gaining rapidly and cheaply a bridgehead east of the Rhine, we should then have a springboard from which to develop

operations into the heart of Germany; if this projected thrust were delivered over the river north of the Ruhr, logically our immediate objective would become the Ruhr industrial region itself, because it was estimated that without it, the German capacity for waging war would peter out within six months.

Having isolated the Ruhr, we should be free to develop operations in the open plains of northern Germany. Since the Ruhr was the enemy's premier industrial region, it was obvious that he would concentrate his available military resources in the north to defend it; in tackling this objective, therefore, we should bring the German Army in the north to battle and could finish it off in country suitable for the development of our superior mobility. Providing, therefore, the essential prerequisites of speed *and concentration of maintenance resources* could be effected, I favoured a drive into Belgium with the clearance of the Channel coast as far as Antwerp, the establishment of our air forces in Belgium, and a speedy and all-out drive along the northern axis into Germany.

The alternative course open to the Allies on crossing the Seine was to drive to the Rhine on a broad front. I shall refer to this as the 'broad front' policy: to distinguish it from the single concentrated thrust project I have discussed above.

The broad front policy implied lining up the Allied Armies along the length of the River Rhine, and then developing operations for the capture of both the Ruhr and the Frankfurt areas. Subsequently, operations into Germany could be staged either on the northern axis, or through the Saar and Frankfurt, or along both routes: according to the situation at the time. The main point of difference in the two plans was that the broad front policy avoided the risks of developing long range operations on a relatively narrow front; it was the opposite of 'sticking our neck out' in a single deep thrust into enemy territory. On the other hand it clearly involved a slower and more deliberate campaign, because the Allied Armies would have to develop offensive operations on a very wide frontage; our available administrative resources would be spread accordingly, and in my opinion would not stand up to the strain.

Apart from the administrative difficulties, my objection to the broad front policy was that nowhere should we be strong enough to get decisive results quickly; the Germans would thus have time to recover and we should become involved in a long winter campaign.

The crux of the problem appeared to be whether the Allies could concentrate sufficient strength in the broadest sense to ensure the success of a single deep thrust; if such concentration could not be effected, then the broad front plan was the available alternative.

The Supreme Commander eventually decided on the broad front policy. He came to the conclusion that it would not be

feasible immediately to concentrate adequate administrative resources to carry us in sufficient strength across the Rhine and deep into Germany. The lines of communication still stretched rearwards to the Normandy beaches and Cherbourg peninsula, and the autumn weather was close upon us; he decided that the early opening of deep water ports and improvement of our maintenance facilities were essential prerequisites to the undertaking of the final all-out assault on Germany.

General Eisenhower's orders were that the Allied Armies should line up along the River Rhine, establishing bridgeheads wherever feasible, and that operations would not be developed farther east until the port of Antwerp was opened and functioning. Meanwhile a firm link-up was to be made with Sixth United States Army Group advancing from the Mediterranean, in order to complete our front from Switzerland to the North Sea. Within the compass of this plan, the mission allotted to 21 Army Group, together with that portion of Twelfth United States Army Group operating north of the Ardennes, was to secure the port of Antwerp, to reach the sector of the Siegfried Line covering the Ruhr, and then seize the Ruhr. The boundary between 21 and Twelfth Army Groups was on the general line Amiens-Brussels-Krefeld, all inclusive to us. Concurrently Twelfth United States Army Group was ordered to occupy the Siegfried Line covering the Saar and to seize Frankfurt.

First Allied Airborne Army was allocated in support of 21 Army Group operations up to and including crossing the Rhine.

In considering the tasks allotted to me, my chief preoccupation was the degree to which I could maintain the momentum of our pursuit with the forces and administrative resources at my disposal: in order to take advantage of the disorganized state of the enemy. 21 Army Group at this time disposed fourteen divisions and seven armoured brigades; but with my own maintenance resources *alone* it was very doubtful whether all of these formations could be maintained from Normandy to Belgium and beyond.

It was very soon made clear that 21 Army Group was not strong enough to carry out unaided the task of capturing the Ruhr; but the time was ripe for securing other important results cheaply. Experience in large scale retreats has always shown the tremendous difficulty of organizing troops who have carried out a long and painful march after being overwhelmed in battle; if we could give the Germans no respite, it was possible that, with their lack of immediate reserves behind, they would not be able to recover sufficiently to oppose serious resistance to our progress.

Was it going to be possible with my own resources alone to keep the enemy on the run right back to the Rhine? This was the overriding problem that faced me.

I have mentioned the great importance I placed on establishing

quickly bridgeheads over the Meuse and Rhine; I was deeply impressed with the magnitude of the military problem of fighting an opposed crossing over these great water barriers, and wanted to avoid it at all costs. Although the broad front policy restricted our present aims to reaching the Rhine, I continued to plan the concentration of such resources as I had into a drive that would hustle the enemy straight through to that river: in order to jump it quickly before the Germans could seriously oppose us. The degree of difficulty which this project involved was directly dependent on the vital factor of speed; for this reason I considered it worth while to employ all our resources for its accomplishment, at the expense of any other undertaking.

The Supreme Commander agreed with this conception of the development of my operations, and I therefore gave first priority to the seizure of a bridgehead over the Rhine. North of the Seine, the operations of 21 Army Group were managed with this object in view, and the chief problem became the accumulation of adequate strength to ensure success.

CHAPTER TWELVE

The Drive Across the Pas de Calais to Belgium, The Clearance of the Channel Ports and the Battle of Arnhem

THE PLAN OF ADVANCE INTO BELGIUM

ON 26 August, I issued detailed orders for the conduct of the advance north of the Seine.

Twelfth Army Group was to operate on our right flank, and directed First United States Army along the general axis Paris-Brussels, with the object of getting established in the general area Brussels-Maastricht-Liege-Namur-Charleroi.

I agreed with General Bradley on a forward boundary on the line Mantes-Beauvais-Tournai-Alost-Antwerp (all inclusive to Second Army).

The immediate tasks confronting 21 Army Group were the destruction of the enemy in north-east France, the clearance of the Pas de Calais with its 'V' bomb sites, the capture of airfields in Belgium, and the opening of the port of Antwerp. I made it clear that our ultimate aim was the isolation of the Ruhr.

I ordered Second Army to cross the Seine with all possible speed and to advance to the area Arras-Amiens-St Pol, irrespective of the progress of the armies on its flanks. From that area, the Army was to be prepared to drive forward through the industrial area of north-east France and into Belgium. Alternatively, General Dempsey was to be ready to operate forces to the north-west in support of an airborne operation which might be developed in the Pas de Calais area. I instructed Second Army to move its armoured strength deployed well ahead; the spearheads were to by-pass resistance and push on with all possible speed in order to cut the east-west communications of enemy forces in the coastal belt; Amiens was to be secured as quickly as possible.

The task of First Canadian Army was to operate along the coastal belt initially as far north as Bruges. As first priority, Dieppe was to be seized and a corps swung into the Havre peninsula to destroy the enemy forces in that area and secure the port. I specified that First Canadian Army was to operate with its main weight on the right flank, dealing with enemy centres of resistance by 'right hooks'.

CROSSING THE RIVER SEINE

Second Army's intention was to cross the River Seine in the vicinity of Vernon with 30 Corps, and between Les Andelys and Louviers with 12 Corps. The concentration of these corps within striking distance of the river took time, because they had to pass across the axes of the two American corps which had driven north-west from the Dreux area to Elbeuf.

At 1900 hours on 25 August the leading brigade of 43 Division (30 Corps) started to cross the river in stormboats under cover of artillery concentrations. The enemy had no prepared defensive positions on the north bank and opposition to the crossing was generally light. The German troops in the area belonged to 49 Division, which was fresh but had been weakened by draft-finding; the enemy was posted in the village of Veronnet and in the hills on the south bank, and from these positions made some attempt to interfere with ferrying and bridging operations. By the afternoon of 26 August this opposition had been cleared, and a second brigade was across the Seine before nightfall. The whole division, together with 8 Armoured Brigade, was on the north bank by 28 August and, in the evening, captured the high ground overlooking the crossing area and established a bridgehead some four miles wide and three miles deep. Behind 43 Division, 11 Armoured Division began to cross, while Guards Armoured Division was already moving forward from Conde on transporters.

In 12 Corps sector, 15 Division assaulted on 27 August in the bend of the Seine some three miles due east of Louviers. The northern crossing, near St Pierre du Vauvray, was virtually unopposed; but the second crossing, about a mile upstream, sustained severe losses and operations in the area were eventually discontinued. The leading brigade completed its crossing at the St Pierre ferry and gradually extended the bridgehead up to the line Muids-Portejoie; the bridge sites were shelled, but by 29 August 15 Division was across the river complete, and the whole loop west of Les Andelys was in our hands. 4 Armoured Brigade and 53 Division began to move into the bridgehead on 30 August, followed by 7 Armoured Division.

On First Canadian Army front, 2 Canadian Corps planned to secure crossings about Pont de l'Arche and Elbeuf, astride a sharp bend in the river about eight miles south of Rouen. On the right, 4 Canadian Armoured Division got patrols across during the evening of 26 August, and the following morning infantry of the division crossed the river on rafts and stormboats and began to expand the bridgehead eastwards. At first light on 27 August, 3 Canadian Division began crossing, and during the day the bend

of the river was gradually cleared of the enemy and Tourville was captured. The two divisions now advanced on Boos and Rouen, in order to cut off the escape routes of the enemy who were still south of the Seine engaged in opposing 2 Canadian Infantry Division in the Foret de la Londe. Boos was secured on 29 August, and leading troops of 3 Canadian Division entered Rouen the following day without opposition. 2 Canadian Division had three days' hard fighting in order to clear the Foret de la Londe; enemy rearguards and remnants put up a stiff fight in the thick woods, and considerable casualties were sustained by both sides. By 30 August, however, 2 Canadian Division was able to cross into the Seine bridgehead.

The two infantry divisions of 1 Corps were the last to force the Seine; they were opposed by relatively strong opposition in the area of the Foret de Bretonne and the mouth of the river. On 29 August, 51 Division reached the loop near Duclair and pushed patrols across the river on the following day, while 49 Division with Royal Netherlands Brigade also got elements over the river on that day between Caudebec and Vieux Port, using assault boats, ferries and any other craft they found on the river bank. By 1 September both divisions were on the northern bank and began pushing forward.

In the Twelfth United States Army Group sector, Third United States Army swept forward to Troyes, Chalons-sur-Marne and Reims; Troyes was reached on 27 August by XII Corps, which subsequently liberated Chalons on 30 August and crossed the Marne. XII Corps then swung south-east towards St Dizier. Meanwhile, on 28 August, XX Corps approached the Marne near Chateau Thierry and two days later entered Reims, after which it was directed due east towards Verdun. XV Corps, which had taken part in the drive along the south bank of the Seine, reverted to Third United States Army on 29 August and was withdrawn to the east of Paris.

First United States Army crossed the Seine between Melun and Mantes Gassicourt and advanced to seize the line Laon-Peronne, whence the advance was to be pushed rapidly to the north-east. On 26 August, VII Corps began to cross the Seine immediately south of Paris and two days later was approaching Coulommiers. Bridgeheads were quickly established over the Marne and by 31 August the Corps crossed the Aisne and had liberated Soissons and Laon. V Corps meanwhile was occupied in restoring order in Paris; on 30 August it advanced north from the city and by the following day had elements just south of Compiègne. XIX Corps took over the Mantes Gassicourt bridgehead and speedily expanded it. On 30 August it moved forward directed on Clermont and Beauvais.

THE ADVANCE OF SECOND ARMY TO ANTWERP
AND BRUSSELS

On 29 August, 11 Armoured Division, with 8 Armoured Brigade under command, led the advance from 30 Corps bridgehead. There were two main axes, on each of which an armoured brigade advanced preceded by an armoured car regiment. On the first day the pace of the advance was restricted by bad weather, extensive demolitions, and small pockets of infantry backed by anti-tank and self-propelled guns. By nightfall the division had reached the Mainneville area, some twenty miles from the Seine. About midday on 30 August, Guards Armoured Division took over the right hand axis from 8 Armoured Brigade, and in the afternoon the Corps Commander ordered 11 Armoured Division to drive on to Amiens through the night in order to seize bridges over the Somme in and to the west of the town. Amiens was reached early on 31 August, and a bridge over the Somme was secured intact with the assistance of the local Resistance Movement.

Just outside Amiens, General Eberbach, who succeeded Hausser as Commander of the Seventh Army, was surprised and captured with his Tactical Headquarters. He had just signed an operation order which revealed the plan of the High Command to withdraw to and fortify the line of the Somme: as the right hand sector of a new defence line that was to extend to Switzerland.

East of Amiens, Guards Armoured Division crossed the river, and by evening had elements astride the Albert-Amiens road. A brigade group of 50 Division, which was closely following the armoured spearheads, also reached Amiens.

When the advance north from the Seine started, I had plans ready for an airborne drop in the Tournai area, to the east of the bend in the River Escaut; my idea was for the airborne forces to operate offensively from the Tournai area in order to destroy enemy elements attempting to escape eastwards from the coastal belt. In conformity with this plan, forward boundaries between the Armies were adjusted generally with the object of swinging the axes more to the east. From Tournai, Second Army's right boundary was altered to run through Ath, on to Brussels, Louvain and Diest; First Canadian Army's right boundary beyond Ypres included Roulers, Thielt and Selzaete, whence it followed the Dutch frontier to the Scheldt.

On 30 August the advance began from 12 Corps bridgehead with 4 Armoured Brigade leading, closely followed by 53 Division. The armour moved twenty-five miles during the day and reached Gournay, with 53 Division about ten miles to the left rear. On the following day 7 Armoured Division passed through the leading troops, picking up 4 Armoured Brigade on its way, and by nightfall

was on the line Poix-Aumale, some fifteen to twenty miles short of the Somme. There was some opposition on the 12 Corps axes and mines, craters and blown bridges were met with frequently. On 1 September, 7 Armoured Division drove on, by-passing enemy opposition at Airaines, and by mid-morning a bridge was secured at Hangest, about midway between Amiens and Abbeville.

Rapid advances were made by troops of 30 Corps during 1 September. Guards Armoured Division outflanked Arras, 11 Armoured Division got astride the Arras-St Pol road, and 8 Armoured Brigade reached Doullens. Patrols reported Lens clear of the enemy. The following day the Guards captured Douai and Tournai and 11 Armoured Division reached the outskirts of Lille, which was by-passed. On the left, 7 Armoured Division reached St Pol and elements crossed the Bethune-Lillers road.

The speed of advance was such that the necessity for an air-borne drop in the Tournai area no longer existed, and the plan was cancelled; the revised boundaries, however, remained unaltered.

Orders were now issued for the next stage of the advance. Guards Armoured Division was directed on Brussels, 11 Armoured Division on Antwerp and 7 Armoured Division on Ghent.

The drive north continued with speed. In the early hours of 3 September armoured cars of Guards Division crossed the Belgian frontier; during the afternoon Hal, some twelve miles short of Brussels, was reached in spite of sporadic resistance. Before nightfall the whole Guards Armoured Division was in the capital and reconnaissance elements were fanning out round the city to control the main approaches. On the left, 11 Armoured Division was temporarily delayed by enemy holding out between Tournai and Lille; the resistance was brushed aside and the division pressed on and concentrated for the night a few miles east of Alost; in rear, 50 Division closed up quickly in order to enter the town in the morning.

On 12 Corps front there was considerably more resistance. In order to provide some protection for the Channel ports, the enemy had moved two fresh divisions, 59 and 712, into the La Bassée-Bethune area; farther west in the area north of St Pol, 64 Infantry Division was encountered, having lately arrived from Germany. While 53 Division and 4 Armoured Brigade were engaged against these enemy formations, 7 Armoured Division swung east before Lille in order to by-pass resistance and get on to its objective at Ghent.

11 Armoured Division entered Antwerp on 4 September and quickly disposed of the enemy elements in the residential quarters of the city. In the dock areas to the north, however, hostile elements hung on for some days, and caused considerable trouble before they were eventually cleaned out. The docks were secured virtually

intact—a major dividend of the great victory in Normandy, and of the subsequent rapid advance. During the following two days, 30 Corps reorganized in the general area Antwerp–Malines–Louvain–Brussels–Alost–Termonde, and made hasty preparations for the resumption of the advance towards the Albert and Meuse–Escaut canals.

At the same time 12 Corps was clearing up the area St Pol–Bethune–Lille, while 7 Armoured Division drove on the axis Roubaix–Audenarde to Ghent, which was captured on the evening of 5 September. With Ghent and the area south of it securely in our hands, 12 Corps relieved 30 Corps in Alost and Antwerp on 7 September and assumed responsibility for the northern flank of Second Army, thus freeing 30 Corps for a swing to the north-east.

Second Army had advanced 250 miles in six days. Spearheads had been provided from three armoured divisions behind which infantry formations, supported by armoured brigades, took over the ground won and conducted the very considerable mopping-up operations which the method of advance involved.

On the right flank of Second Army security was afforded by an equally forceful advance by First United States Army, which had reached the general line Namur–Tirlemont. During the advance this Army had collected no less than 25,000 prisoners in a pocket centring on the Forêt de Compiègne. On the western flank the enemy had still a heterogeneous collection of troops estimated on 4 September to be some 150,000 in number, west of the general line Antwerp–Lille–Bethune–Hesdin. Some of these gradually collected into the fortress defences made round the Channel ports; for the remainder the only line of escape now lay across the Scheldt estuary and into the islands to the north of it. In the first days of September First Canadian Army was closing in on Le Havre with troops of 1 Corps, while 2 Canadian Corps reached the line of the Somme on 3 September.

Elsewhere on the Allied front, Third United States Army had reached Commercy and Verdun on the Meuse, while the Allied Mediterranean invasion force continued to make progress along the Rhone valley.

The Situation, 3 September

On 3 September I issued fresh instructions to 21 Army Group for the further development of operations.

I have already explained in the previous Chapter that the main object constantly before me was to ‘bounce’ a crossing over the Rhine with the utmost speed before the enemy could reorganize sufficiently to stop us. Speed, and still greater speed, was the essential factor, and I now ordered Second Army to drive forward

to the Rhine as quickly as possible. The boundary between Second Army and First United States Army was laid down on the line (all inclusive to First United States Army) Wavre-Tirlemont-Hasselt-Sittard-Leverkusen; the latter place is on the Rhine some six miles north of Cologne. Beyond the Rhine the boundary inclusive to 21 Army Group ran along the southern face of the Ruhr to Warburg and Brunswick. This boundary involved 21 Army Group in a very long frontage along the Rhine, and I directed Second Army to move its main weight up to the river between Wesel and Arnhem. It was my intention at this period to threaten the western face of the Ruhr frontally, to jump the river north of the Ruhr and, subsequently, to by-pass that region round its northern face; at the same time preparations were to be made to swing forces from the Rhine bridgehead round into southern Holland, directed on the ports of Rotterdam and Amsterdam. The Supreme Commander had instructed First United States Army to move forward in conjunction with us, directing its left flank to the Rhine between Bonn and Cologne. There was no change in the tasks of First Canadian Army, which were to clear the coastal belt up to Bruges and subsequently develop operations for the clearance of the Scheldt estuary, in order to give access to Antwerp from the North Sea.

The rapidity of our advance from Normandy had placed severe strains on our administration. With our arrival in Brussels and Antwerp, the lines of communication became some 300 miles long, but we now had the opportunity of establishing our advanced base in Central Belgium, which, as soon as the Scheldt was cleared, could be served by a first class port in good condition.

At the time, however, the advance produced administrative problems of great complexity; it had been expected that there would be some pause in operations between Normandy and Belgium which would have afforded an opportunity for the building up forward of essential stores. There was no pause; our dumps remained in the Rear Maintenance Area in Normandy, and the problem of supplying two corps advancing up to forty miles a day had to be solved. 8 Corps was grounded and all its second line transport, together with half its first line transport, was switched to the maintenance of 12 and 30 Corps. In First Canadian Army also, it soon became necessary to ground some units in order to maintain the momentum of others.

On 30 August a decision was made to rely on the early capture of a Channel port such as Dieppe or Boulogne, and to reduce meanwhile the quantities of stores and vehicles being brought in through Normandy. In view of the satisfactory level of supplies of all natures it was decided to cut down our imports from an average of some 16,000 tons per day to 7,000 tons per day. It thus

became possible to release a considerable amount of transport from beach and port clearance for the task of supplying the forward troops.

The consumption of petrol during the pursuit was enormous and the greater part of the available transport was used in bringing it forward. The principle remained that the expenditure of ammunition is in inverse ratio to that of petrol; demands for the transport of ammunition did not therefore often conflict with those for petrol.

Road control became a factor of the utmost importance, particularly in view of the temporary bridges over the Seine and numerous other rivers. Tank transporters, which had formerly been severely restricted on the roads, now had to travel in large numbers over great distances, and special convoys frequently had to be shepherded along prearranged routes by Military Police detachments. To achieve the necessary flexibility, all third line transport was pooled and placed directly under Army control, and the tasks of all supply columns had to be extended. First line transport collected from the Field Maintenance Centres, second line transport from the Army Roadheads, while third line and GHQ transport brought supplies from the Rear Maintenance Area to the Army Roadhead. The RASC columns concerned sometimes covered two hundred miles a day during this period.

One of the greatest difficulties in our rapidly lengthening lines of communication was the lack of signal communications, as the telephone lines had been destroyed and distances soon became too great for field wireless apparatus. This meant that despatch riders had frequently to be used, with attendant delays. The slowness of communications affected flexibility of supply as it was difficult to give sudden switches of priority when they were required.

It might have been expected that in such a lengthy advance the Armies could have found some relief to supply problems from captured enemy dumps. In the event, a very minor dividend was obtained from this source, probably due to the accuracy of our bombing of the enemy dumps themselves and of the communications leading to them. The maintenance of the pursuit was largely achieved by the cutting of our imports and by the grounding of fighting formations.

THE ADVANCE OF SECOND ARMY TO THE MEUSE-ESCAUT CANAL

Second Army continued its advance from the Brussels-Antwerp area with minimum delay.

Stretched along a general line between Hasselt and Antwerp, facing Second Army front, the enemy disposed 176, 719 and elements of 347 Divisions. These troops were bolstered up with

battle groups from parachute formations and remnants from 1 SS Panzer Division.

Second Army's intention was to advance with 30 Corps leading, while 12 Corps deployed to guard its left flank; on the right flank was First United States Army. As a first stage in the advance to the Rhine, 30 Corps plan was to position Guards Armoured Division in the Eindhoven area and 11 Armoured Division in the area Turnhout-Tilburg. These manoeuvres entailed the passage of a number of water obstacles, in particular the Albert Canal and the Meuse-Escaut Canal. On the morning of 7 September Guards Armoured Division advanced on Diest, while armoured cars fanned out to reconnoitre the line of the Albert Canal from Beeringen to Herenthals. All bridges were reported blown, and the division planned to force a crossing near Beeringen. Meanwhile, 11 Armoured Division was attempting to cross the canals north of Antwerp, but encountered considerable resistance and began to search for weaker spots to the east; orders were subsequently issued for 50 Division to secure a bridgehead on the left of Guards Armoured Division, in some suitable area between Beeringen and Gheel.

On 8 September, Guards Armoured Division crossed the Albert Canal at Beeringen and established a bridgehead despite considerable opposition. The advance was now directed north-east with the immediate object of seizing the De Groot bridge over the Escaut Canal near Neerpelt. By nightfall on the same day, 50 Division had secured a small bridgehead over the canal south-west of Gheel; in this area, also, still resistance was encountered and the enemy delivered a number of well staged counter attacks.

The bridgeheads were gradually extended and on 10 September the Guards broke through to Overpelt, and made contact with the perimeter defences of the De Groot bridge. Confused fighting ensued, not only in the vicinity of the canal but also farther south round Hechtel and the wooded areas to the south-west; by last light, however, the bridge was secured and infantry and tanks began crossing. The position was strengthened on 11 September. In view of the opposition and the exposed nature of the eastern flank, 11 Armoured Division was switched to the general area Peer-Bree-Helchteren, and 50 Division was subsequently relieved in the Gheel bridgehead by 15 Division of 12 Corps. 15 Division gradually pushed the enemy back to the Escaut Canal and on the night 13 September secured a bridgehead over it near the Gheel-Rethy crossing. The remainder of 12 Corps was now being relieved by Canadian Army in the Ghent area, and was moving across into the area Gheel-Diest-Malines-Antwerp.

The enemy was developing more spirit in his attacks against

our bridgeheads over the Escaut Canal, and had clearly received reinforcements of better calibre; a number of sharp counter attacks was delivered, particularly in the area of the De Groot bridge.

It was now necessary for Second Army to make another short pause. Administrative difficulties had to be overcome and some stocks built up forward. Although it was apparent that the clearance of Havre was going to be a lengthy undertaking, Dieppe was opened on 8 September and the first coaster arrived there two days later. The capacity of this port increased rapidly and by the end of the month it was handling between 6,000 and 7,000 tons a day.

The control of transport over the long lines of communication had become a major problem which was solved by the establishment in Amiens of an organization called 'Tranco', under which transport working in rear of Army Roadheads was centralized.

In spite of our efforts and improvisations, however, I was not happy that the administrative build-up was proceeding fast enough for our purpose, and on 7 and 9 September I reported to the Supreme Commander that even with a port working in the Pas de Calais I should be unable to get over the Rhine without additional administrative assistance. On current reckoning I feared that Second Army would have to wait until 23 September, if not later, before sufficient resources had been built up forward to permit resumption of the advance; this delay would give the enemy his chance of strengthening and co-ordinating resistance before the German frontier. On 12 September, General Bedell Smith visited me on behalf of the Supreme Commander and, after discussing the situation, undertook to provide us with an increased daily air lift together with some American truck companies, in order to speed up our preparations. At the same time, First United States Army was to receive priority of maintenance requirements in Twelfth Army Group so that its operations on our right flank could be intensified. In subsequent weeks air freight deliveries averaged 400 to 500 tons per day, and by road special American fast convoys brought 500 tons per day to our Army Roadhead near Brussels. The main commodities delivered consisted of petrol and the special requirements for American airborne divisions.

With this assistance I was able to advance the date of Second Army's thrust to the Rhine to Sunday, 17 September.

The approach of autumn weather was now giving cause for anxiety but, providing weather conditions permitted the full development of our air power and unhindered use of airborne forces, I was confident that we now had sufficient resources to secure our Rhine bridgehead. But we were working on a minimum margin, particularly from an administrative point of view.

FIRST CANADIAN ARMY OPERATIONS ON THE
CHANNEL COAST

1-12 September

2 Canadian Corps moved out of the Rouen bridgehead on 31 August, and 4 Canadian Armoured Division on the right flank advanced twenty miles during the day to Forges and Buchy. In the centre, 3 Canadian Division advanced on the axis St Saens-Londiniers, and captured Eu and Le Treport on 1 September. On the left, 2 Canadian Division drove straight through Totes on Dieppe, meeting virtually no resistance; the division entered the port towards the evening of 1 September.

Advancing from Buchy through Aumale, 4 Canadian Armoured Division reached the Somme on 2 September, and by the next morning had a bridgehead across the river in the area of Pont Remy. It then concentrated astride the Somme while 1 Polish Armoured Division crossed the river on its left north of Abbeville; the advance was subsequently continued towards St Omer and the area Ghent-Bruges.

49 and 51 Divisions of 1 Corps advanced north of the Seine on 1 September, and while the former swung left into the Harve peninsula, the Highlanders went straight for St Valery and liberated the town on 2 September. The same day reconnaissance elements of 49 Division made contact with enemy outposts about three miles short of the River Lezarde. On the following day, the enemy covering troops were driven back to the perimeter defences of Le Havre, which ran across the peninsula from the mouth of the Seine to the Channel coast about six to eight miles from the centre of the town. Probing on 3 September showed that the elaborate defences of Havre were fully manned, and that a full scale set piece attack would be necessary to reduce the city. 51 Division was ordered to take over the northern sector of the perimeter and preparations for the assault were put in hand.

2 Canadian Corps continued to advance rapidly north of the Somme; the Polish Armoured Division crossed the canal at St Omer on 6 September, while on its left 3 Canadian Division closed in on the defences of Boulogne and Calais on 5 September; reconnaissance revealed that the enemy was intending to fight in defence of both these ports. 2 Canadian Division followed the leading troops north and passed through 3 Division in order to close on Dunkirk, into which a strong enemy garrison had retired; detachments were pushed on to Nieupoort and Ostend, both of which were occupied on 9 September.

At this stage 4 Canadian Armoured Division began to come up on the left of the Poles and was directed on the Ghent-Bruges

canal, which was held in some strength by the enemy. On 9 September a crossing was secured south-east of Bruges and mopping up of the town and surrounding area was undertaken. The Polish Armoured Division was now moved into the Ghent area to relieve 12 Corps and began local operations to clear the area to the north-east, while on the coast light forces progressed speedily as far as Zeebrugge.

As a result of these operations we were now investing enemy garrisons in Boulogne, Calais and Dunkirk; elsewhere the Pas de Calais was clear.

The attack on Le Havre by 1 Corps began at 1745 hours on 10 September, after the defences had been softened by the heavy guns of the Royal Navy and by a series of attacks by Bomber Command. The air preparations culminated in a ninety-minutes attack before H-hour in which nearly five thousand tons of bombs were dropped. 49 Division broke into the enemy positions at the north-east corner of the perimeter, and by midnight 51 Division had also penetrated the enemy defences. By dark on 11 September both divisions were working their way into the town itself and had reached the high ground overlooking the harbour; operations continued with vigour during the night and the following morning, until at 1145 hours the garrison commander surrendered. 12,000 prisoners were collected. Le Havre constituted one of the strongest fortresses of the Atlantic Wall and had been provided with most elaborate concrete defences, extensive minefields and other obstacles, but it had been reduced after forty-eight hours' fighting.

The Canadian advance along the coast had been conducted with creditable speed. Great difficulty was experienced owing to the bad routes astride the Seine below Rouen; the Somme bridges below Amiens had been blown; and organized resistance continued in the coastal sector from the time of our advance across the Dives. As Second Army forged ahead cutting the east-west communications of the enemy on the coast, however, the opposition to Canadian Army loosened, with the result that the pace of advance quickened. The "V" bomb sites were overrun, and very considerable numbers of prisoners were rounded up.

THE ADVANCE TO THE MEUSE AND RHINE : THE BATTLE OF ARNHEM

The Enemy Situation

It was at this time that Field Marshal Model, who, a fortnight previously, had succeeded temporarily to the Western Command (following von Kluge's suicide), managed to rally his demoralized forces and, by remarkable improvisation, to re-establish a front.

Regimental and divisional commanders were empowered to form battle groups with such troops as they could muster locally from stragglers, reinforcements, lines of communication units, etc. These battle groups had, of course, no more than light infantry weapons, but they were able to base their anti-tank defence on a large number of 88 millimetre flak guns turned to a ground role with good effect. Such battle groups could not stop us, but, making full use of the numerous water obstacles, they could reduce our impetus. As our lines of communication grew longer, this improvised screen hardened.

Later in the month von Rundstedt was reinstated as Commander-in-Chief, but Model remained the Commander of Army Group "B".

The Administrative Situation

Maintenance difficulties remained our major problem. Although it had been possible to get Dieppe working very quickly, the damage and dislocation caused to the French railway system by the Allied air offensive made the restoration of rail traffic extremely difficult. In particular, shortage of locomotives and railway stock, combined with the destruction of signal facilities and bridges, demanded the expenditure of very considerable resources in manpower and materials in order to restore even a limited degree of train working.

Operations by United States Forces

During the first half of September, First United States Army, in face of considerable opposition, thrust to the German frontier and was in contact with the defences of the Siegfried Line; it was planned that the Army should continue its operations to Bonn and Cologne, while the left hand Corps was responsible for the northern American flank operating along the inter-Army Group boundary. Farther to the south General Patton's Third United States Army had established bridgeheads over the Moselle.

Orders to 21 Army Group, 14 September

My intention now was to establish bridgeheads over the Meuse and Rhine in readiness for the time when we could advance eastwards to occupy the Ruhr. I ordered Second Army to secure crossings over the river obstacles in the general area Grave-Nijmegen-Arnhem. I had decided upon this thrust line after detailed study of the possible routes in the 21 Army Group sector. Although this axis involved the additional obstacle of the Lower

Rhine (Neder Rijn) as compared with more easterly approaches, and would carry us to an area relatively remote from the Ruhr, it satisfied three major overriding considerations: we should outflank the Siegfried defences; we should strike on the least likely line from the enemy's point of view; and our airborne forces would be operating in the most favourable conditions of range from home bases.

The Airborne Corps (General Browning) of three divisions was placed under Second Army's command.

Having secured the crossings, operations were to be developed to establish strong forces on the line Arnhem-Deventer-Zwolle, facing east, with bridgeheads on the east bank of the IJssel river. Preparations were then to be made to advance east on the general axis Rheine-Osnabruck-Munster-Hamm, with the main weight on the right flank directed to Hamm: whence a thrust would be made along the eastern face of the Ruhr. My instructions were that the drive northwards to secure the river crossings would be made with the utmost rapidity and violence, and without regard to events on the flanks. The corridor of supply was to be widened and consolidated while the main advance continued.

Meanwhile the whole energies of First Canadian Army were to be directed towards opening up the port of Antwerp, which involved clearance of both banks of the Scheldt estuary. It was also necessary to capture Boulogne and Calais, as they would be useful subsidiary ports, and we required to release our containing forces for operations elsewhere. I decided it would be necessary to continue the investment of Dunkirk, as its reduction would have demanded the diversion of relatively major resources which at this time we could not afford. In order to provide transport for the Army it was necessary to ground 51 Division in the Havre area, but Headquarters 1 Corps and 49 Division were to be brought up to Antwerp as quickly as possible. Canadian Army was to take over the Antwerp sector from Second Army beginning on 17 September, and subsequently the inter-Army boundary, all inclusive to Canadian Army, would become Herenthals-Turnhout-Tilburg-'s Hertogenbosch-Zaltbommel-Utrecht-Hilversum. Initially the main drive to the north by Canadian Army would be directed on the port of Rotterdam, but at a later stage it was my intention that it should be brought up on the northern flank of Second Army directed on Bremen and Hamburg.

THE SECOND ARMY PLAN FOR THE BATTLE OF ARNHEM

The Second Army task involved establishing crossings over five major obstacles; the Neder Rijn at Arnhem, the Waal at

de main against an objective such as a bridge, it is desirable to land them on both sides of the water obstacle, so that they can close in from all directions. Unfortunately, available reports concerning the terrain between the Waal and the Neder Rijn, including the opinion of Dutchmen living there, was that the area was basically unsuitable for airborne dropping or landing zones. Moreover, the flak defences at Arnhem and in the region of the Deelen airfield made it necessary to land some eight miles from Arnhem itself. These were difficulties which had to be accepted, but in the event they placed us at a great disadvantage.

30 Corps intention was to thrust north with all possible speed from the Meuse-Escaut Canal bridgehead along the airborne carpet to secure the general area Arnhem-Nunspeet, both inclusive. The Guards Armoured Division was to be the spearhead of the advance and had the ultimate task of dominating the area between Apeldoorn and the Zuider Zee; 43 and 50 Divisions were to follow up. Should any of the bridges at Grave, Nijmegen or Arnhem have been destroyed, the plan was for the armour to fan out along the river bank and, in conjunction with airborne troops, facilitate bridging operations, which were to be carried out by 43 Division. The ultimate task of 43 Division was to secure the area from Apeldoorn south to points of contact with 1 Airborne Division, and to secure crossings over the River IJssel at Deventer and Zutphen. 50 Division was designated Corps reserve, and was ultimately to reorganize on the high ground north of Arnhem, pushing forces to the east in order to secure a crossing over the IJssel at Doesburg. The task of opening initially the main road axis to the north fell to the United States airborne divisions; 8 Armoured Brigade was to join 101 United States Airborne Division to assist in holding the corridor through Eindhoven, Veghel and Grave.

Plans were made for a very heavy scale of air escort and air support; the task of neutralizing the enemy flak in the majority of the area covered by the airborne carpet fell to the air forces, but arrangements were made to bring normal artillery into action as quickly as possible in support of the airborne troops.

The operation involved the most detailed traffic control. Until the corridor was widened, all traffic of 30 Corps and the seaborne transport echelons of the airborne divisions had to move tactically along one route, supplemented by a subsidiary axis, which joined the main road at various bottlenecks.

The plan involved provision for bridging on a vast scale; preparation had to be made for the construction and maintenance of crossings over the major obstacles, apart from subsequent requirements in the advance over and beyond the River IJssel. 8 and 12 Corps on the flanks of the main thrust also required

considerable quantities of bridging to provide for their respective advances across the canals of southern Holland. The bridging resources were assembled in the Bourg Leopold area, and organized in columns of pre-arranged composition which were held in readiness to be called forward if and when required.

Most intensive measures were taken to build up stocks forward for Second Army to carry through this long advance. Meanwhile a rapid regrouping was carried out. 8 Corps assumed responsibility for the right flank of Second Army, taking over 11 Armoured Division, which continued to probe east and south-east to the line of the Meuse-Escaut Canal in the Lanklaer-Bree area. 1 Belgian Brigade also passed to command of 8 Corps, while 3 Division, which was being called forward from south of the Seine, was due to arrive in the Bree-Neerpelt sector by 17 September. 12 Corps, with 7 Armoured, 15 and 53 Divisions, adjusted its dispositions to the east from Antwerp and took over the bridgehead north of Gheel, where 15 Division was in the line. Within 30 Corps, 50 Division relieved the Guards in the De Groot bridgehead, so that the latter might concentrate for the drive north; 43 Division assembled to the north-east of Diest.

During the process of our regrouping the enemy made a number of counter attacks against the bridgeheads over the Meuse-Escaut Canal, and it was becoming increasingly evident that he was succeeding in the organization of a co-ordinated defensive system. For our part, the very utmost drive and energy was centred on speeding up preparations; in deciding on the target date of 17 September for the attack, time had been cut to the absolute minimum, bearing in mind the available resources at our disposal and the time taken to plan an operation of this scope involving the employment of major airborne forces.

THE BATTLE OF ARNHEM

Operations, 17 September

On the morning of 17 September the weather was fine and generally favourable for an airborne operation. During the morning the vast fleets of aircraft and gliders converged on their landing and dropping zones, the initial drops having been planned for 1300 hours. In general terms surprise was achieved and initially light opposition was encountered.

Paratroops of 101 United States Airborne Division were quickly established at Son, between Eindhoven and St Oedenrode; they secured the bridge at Veghel intact, though at Son the crossing over the Wilhelmina Canal was blown by the enemy when paratroops were within a few hundred yards of it. 82 United

States Airborne Division landed according to plan and seized the bridge over the Mass at Grave intact, and later secured two bridges over the Mass-Waal Canal between Grave and Nijmegen. Efforts by this formation to rush the Nijmegen bridge were unsuccessful, but they reported the bridge intact. News from 1 British Airborne Division was scarce, but it appeared that the north end of the Arnhem bridge was in our hands and air reconnaissance showed gliders in its vicinity.

30 Corps gave the order to Guards Armoured Division to commence the advance at 1425 hours, as the airborne echelons came into view. The advance was preceded by a rolling barrage astride the Eindhoven road, in conjunction with rocket firing Typhoons which worked on the 'cab rank' system controlled from the forward area. Strong opposition was encountered from parachute infantry dug in along the road axis and supported by some self-propelled guns, but after hard fighting an advance of six miles was made and the village of Valkenswaard was occupied. On the flanks of 30 Corps the enemy was active, while 8 and 12 Corps completed their arrangements for making further crossings of the Meuse-Escaut Canal.

Operations, 18 September

The fighting along the canal had shown the need for more infantry, and a brigade of 50 Division was therefore brought forward. The advance from Valkenswaard was resumed at 0600 hours on 18 September by the Guards, while 50 Division mopped up behind the armoured spearhead. Enemy defending Aalst were brushed aside and attempts made to enter Eindhoven; it was, however, soon determined that the town was strongly held. Efforts were then directed to by-passing the opposition, initially to the east, but strong enemy positions were found four miles from the main road. The bridges on the western approaches to the town would not take tanks, but armoured cars managed to get through and to make contact with elements of 101 United States Airborne Division to the north-west of Eindhoven. The American troops reported the Son bridge blown and engineer material was ordered forward. The battle for Eindhoven continued; the Americans were first into the town, in the northern sector, while at 1700 hours an attack by the Guards finally broke the enemy resistance. The advance was pressed on to Son where bridging was put in hand. 50 Division continued mopping up to the south, and ensured the security of the De Groot bridgehead, which the enemy again counter attacked from the north-east; in order to relieve 30 Corps of the responsibility for this bridgehead, 50 Division was transferred to command of 8 Corps.

North of Eindhoven, 101 United States Airborne Division organized its hold on the nodal points astride the axis up to the Grave bridge, while 82 Airborne Division continued attempts to get through to the Nijmegen bridge, but an increase in the enemy defenders prevented its capture. Meanwhile the first of a series of counter attacks was made from the direction of the Reichswald Forest; this achieved some temporary success and reached one of our landing zones before the enemy was eventually repulsed. During the counter attack a glider lift of reinforcements arrived, some four hours behind schedule, owing to bad weather at the bases in England.

Reports from the Arnhem area were still scanty. While the main body of airborne troops was established west of the town, it appeared that elements of the parachute brigade were holding out at the road bridge, which remained intact. The Germans, however, were holding the town in strength with a garrison which included tanks and self-propelled guns. The reinforcements for 1 Airborne Division arrived four hours late, and formed up with the object of pushing into Arnhem, but were held at the western exits and became virtually surrounded. At the end of the day, therefore, it appeared that the division was in three parts, and although losses to the fly-in on this day had been almost negligible, re-supply had failed owing to poor visibility and heavy flak.

On the right flank, 8 Corps planned to force a crossing of the Escaut Canal with 3 Division after midnight on 18 September in the vicinity of Lille St Hubert. The bridgehead was to be pushed to the line Weert-Soerendonk, while 11 Armoured Division pressed forward to the Helmond-Deurne area east of Eindhoven. 12 Corps, by the morning of 18 September, had secured a new bridgehead near Lommel and during the day was building up on the north bank of the canal in face of considerable opposition, while farther to the west 15 Division was strengthening the Gheel bridgehead. 12 Corps planned to push 53 Division west of Eindhoven astride the Eindhoven-Turnhout road, while 15 Division secured the area Rethy-Casterle-Arendonck, whence operations were to be developed farther to the north.

Operations, 19 September

The Guards Armoured Division started to cross the Son bridge at 0615 hours, and by 0900 hours leading elements had advanced twenty-five miles and linked up with 82 United States Airborne Division at the Grave bridge. Farther north, the bridge over the Maas-Waal Canal was found unfit for tanks, and a detour became necessary to the canal crossing just north of Heumen.

By early afternoon armoured cars had reached the banks of the Waal, and the armoured brigade was concentrated about three miles south of Nijmegen. Meanwhile the American paratroops were having very stiff fighting, particularly on the eastern flank, which was being counter attacked from the Beek area. Enemy action delayed the plans for launching an attack on the Nijmegen bridge for several hours, but at 1845 hours armour broke in to part of the town; it proved impossible, however, to get to the bridge, the approaches to which were covered by a number of self-propelled guns and concrete pull-boxes. It was therefore decided to renew the assault the following day with a frontal attack by the Guards Division, together with an assault crossing west of the bridge by American paratroops, who were subsequently to swing in against the northern end of the objective.

At Arnhem the situation was still obscure. 1 Airborne Division was endeavouring to concentrate all its forces some four miles west of the bridge, while troops of the parachute brigade maintained their hold on a small area in the immediate vicinity of the bridge itself. Other parties were still holding out in houses on the west side of the town but the enemy had brought up tanks and artillery which were gradually reducing the buildings to rubble. Food and ammunition were getting short owing to the failure of re-supply on 18 September.

101 United States Airborne Division had considerable fighting during the day; the enemy was in fair strength in the area of Schijndel, and also held the Helmond area. Meanwhile the first of what was to be a long series of counter attacks against the Eindhoven-Nijmegen axis was developing, for quite unexpectedly a small but well-equipped 'pocket' Panzer division, 107 Panzer Brigade, arrived from the Rhineland via Venlo. A strong attack with tanks against the bridge at Son was successfully driven off, but some anxiety was felt about the stability of the situation in the Uden area, and operations were developed to 'firm up' the corridor there.

The weather on 19 September was generally bad, and the resultant dislocation of the air lift programme was to have serious repercussions on the course of the operations. Apart from its effect on airborne reinforcement and re-supply, the weather began seriously to restrict the action of the Allied Air Forces. Not only was close support of the ground troops limited, but we were unable to interdict the enemy's reinforcement routes. The concentration of enemy forces, in particular against the Arnhem bridgehead, continued rapidly whereas close support of the Arnhem bridgehead forces, which were extremely weak in artillery, was virtually precluded.

Although transport aircraft braved the weather, most of the

re-supply for 1 Airborne Division again fell into enemy hands, as the dropping zones were occupied by Germans, and it had not been possible to alter them owing to faulty communications. In the case of 82 United States Airborne Division, only about twenty-five per cent of the re-supply tonnage reached the troops and the glider lift for 101 United States Airborne Division was only two-thirds effective. The balance of the glider lift for 82 Airborne Division was not flown, nor was it possible for the Polish Parachute Brigade to take off from its bases in England. The latter setback was particularly grave, as this brigade was intended to land south of Arnhem in order to reinforce the operations of 1 Airborne Division, and at the same time it was hoped that it would establish contact with the forces investing Nijmegen.

The enemy anti-aircraft artillery was increasing rapidly and the columns of aircraft encountered heavy fire in approaching their landing and dropping zones.

Meanwhile, efforts were intensified to speed up the operations of 8 and 12 Corps in order to widen the corridor. The extreme congestion on the main Eindhoven road axis was making it difficult to increase our forces in the foremost area in order to hasten operations for the relief of 1 Airborne Division. The deterioration of the weather made it essential to reinforce the Arnhem forces by ground troops and particularly by artillery; but the enemy opposition was increasing, and our own troops were fighting without their accustomed scale of artillery support owing to shortage of ammunition.

In the 8 Corps sector, 3 Division secured its bridgehead at Lille St Hubert early on 19 September, and 11 Armoured Division began to push north. By midday our armour was in contact with enemy at Leende; patrols subsequently reached Heeze, two miles farther north. On the 12 Corps sector a project to secure a bridgehead at De Maat was abandoned in view of the opposition, and it was decided to concentrate on exploiting north from the bridgehead at Lommel. Troops of 53 Division attacked from this area, reaching the line of the Eindhoven-Turnhout road near Duizel, where there was considerable fighting. Meanwhile one brigade struck north-east and captured Veldhoven, and made contact with 50 Division at Mereveldhoven.

The progress of the two flank corps was thus depressingly slow; apart from the enemy resistance, the difficult nature of the country, which was flat and intersected by a great number of minor water lines, greatly impeded progress; we were not strong enough to accelerate further these operations, and as a result the flanks of the long 30 Corps salient were thinly held and lay open to attacks by the enemy battle groups assembling against us.

Operations, 20 September

There were now three major considerations in the conduct of the battle. First, it was imperative to secure the Nijmegen bridge; second, it was necessary to strength 82 United States Airborne Division, as the enemy was building up considerable forces in the Reichswald Forest; third, relief had to be brought to 1 Airborne Division at Arnhem.

Guards Armoured Division planned to capture the Nijmegen bridge in a joint operation with 504 Regimental Combat Team. During the morning of 20 September the Anglo-American forces gradually cleared the town of Nijmegen up to the southern approaches to the bridge. It was apparent that the enemy had been reinforced during the previous night with elements of SS troops, and bitter fighting took place in the town. Meanwhile American troops received some rapid instruction in the use of British assault boats preparatory to forcing a crossing of the river west of the bridge, and while these preparations were in hand there was heavy fighting on the east flank where the enemy launched a series of counter attacks. At 1500 hours the assault across the Waal started, about one mile west of the town. The operation was in full view of the enemy and there were only sufficient boats to carry one battalion at a time; on the north bank the assault had to be carried across several hundred yards of flat open country in order to capture an old fort surrounded by a moat. Subsequently the attack was to be swung in on the northern exits of the main road and railway bridges. Fire support was limited, and in the event smoke cover proved ineffective on account of the weather. In spite of these difficulties the American troops carried out a magnificent operation; although they suffered considerable casualties, they pressed on desperately and by 1845 hours had secured the northern end of the railway bridge and soon afterwards the exit from the road bridge. On the south side of the river the Guards were having a hard fight near the southern ends of the bridges; the sight of the United States flag on the northern end of the railway bridge was the signal for the Guards' tanks to launch a head-on attack which carried the defences and enabled leading elements to cross the river and join up with the Americans. Considerable mopping up was necessary in the bridge areas, while the demolition charges were removed and the last defenders eliminated.

Plans were now made to push on north to Arnhem on the following day, while 43 Division closed up rapidly from the south.

At Arnhem the situation was becoming acute. Although supplies were successfully dropped on 20 September, it was still impossible to bring in the Polish Parachute Brigade; therefore the vital airborne link between Arnhem and Nijmegen was still

lacking while the enemy concentrated increasing forces of high calibre against 1 Airborne Division. The British troops had by now withdrawn into a small perimeter covering the Heveadorp ferry and the wooded area round Oosterbeek. The perimeter was subjected to concentrated artillery and mortar fire and pressed on all sides; the town of Arnhem was by now completely in enemy hands and nothing was known of the survivors of 1 Parachute Brigade.

In the southern sector, 101 Airborne Division held its positions firmly in face of a series of attacks launched against the corridor. Renewed attacks on Son were driven off, though enemy detachments from the Helmond area, backed by tanks and self-propelled guns, infiltrated on to the main road during the morning. A counter attack by American paratroops and units of the Royal Tank Regiment and Yeomanry restored the situation by midday, and the flow of traffic north was resumed.

11 Armoured Division on the right flank made strong efforts to increase the pace of advance to the north. Some progress was made and Someren was captured. In 12 Corps area slow progress was made against stiff opposition towards Best and Oirschot.

Operations, 21-30 September

Every possible effort was now concentrated on relieving the Arnhem bridgehead forces. With the exception of 23 September, adverse weather conditions continued severely to restrict air operations; on 22 September it was impossible to carry out any troop carrier operations at all. As a result we continued to suffer from lack of support from the air in its widest sense.

On 21 September the Guards resumed attempts to progress northwards, while 43 Division came into the Nijmegen bridgehead. The advance was eventually halted by a strong anti-tank gun screen south of Bessem. It was almost impossible to manoeuvre armoured forces off the roads, which generally ran about six feet above the surrounding country and had deep ditches on both sides. On this day, however, it was found possible to drop about two-thirds of the Polish Parachute Brigade in the area north and north-west of Elst. Unfortunately the drop was nearer the village itself than had been intended and the brigade sustained considerable casualties from enemy holding it. The paratroops suffered delays in concentrating for their task, which was to cross the Neder Rijn and reinforce 1 Airborne Division. The latter meanwhile was cut off from the river, as the enemy garrison from Arnhem had now captured the Heveadorp ferry terminal.

On 22 September, 43 Division resumed the attack north from the Nijmegen bridgehead while armoured car patrols pushed west

towards 's Hertogenbosch. The attack was held up outside Elst, but a mixed column of tanks and infantry succeeded in making a detour to the west and in joining up with the Poles near Driel, and in reaching the Neder Rijn. The river was under close and concentrated enemy fire, and it was found that the banks were too steep for the amphibious lorries which were carrying relief supplies; as a result only very small quantities of stores were got across that night.

Meanwhile to the south, the 30 Corps axis was cut during the middle of the day between Uden and Veghel by enemy infantry and tanks attacking from the north-west. The infantry brigade of Guards Armoured Division from Nijmegen was despatched to assist in re-opening the axis; this was successfully achieved and the road was re-opened by the afternoon of 23 September.

43 Division continued its operations from the Nijmegen bridge-head on 23 September, but was unable to break through Elst. In the afternoon the Glider Regiment of 82 Airborne Division and the balance of the Polish Brigade were flown in, and at night about 250 Poles were ferried across the Neder Rijn to reinforce 1 Airborne Division. The following night infantry detachments crossed the river, but intense fire from the high ground on the north bank put a stop to these operations at first light. These troops did not make contact with 1 Airborne Division, and it was now decided that it would not be possible to fly in 52 (air portable) Division as had been hoped. Fighting continued violently in the area of Elst and Bommel and it was not until the afternoon of 25 September that this area was cleared. The main axis was again cut south of Veghel during the afternoon of 24 September and in spite of strenuous efforts by 101 Airborne Division the enemy built up considerable forces astride the road. Fighting to re-open the axis continued throughout 25 September and traffic was not able to resume until the following day.

Meanwhile 8 and 12 Corps made some further progress on the flanks of the salient. Weert was captured on 22 September and Deurne two days later. By the evening of 25 September, Helmond and Gemert were in our hands and 8 Corps was in contact with elements of 30 Corps at St Antonis. 12 Corps made progress in the triangle between the Eindhoven-Turnhout road and the Eindhoven-'s Hertogenbosch axis, but the enemy still held out in Best and Boxtel.

On the morning of 25 September I decided to withdraw the gallant Arnhem bridgehead that night. Owing to the casualties they had suffered and the shortage of ammunition and supplies, their positions were no longer tenable in face of the mounting enemy opposition. The Germans now dominated in strength all possible crossing places of the Neder Rijn, so that reinforcements

and supplies could only be ferried over the river in minor quantities with great risk by night. During the night 25/26 September the withdrawal was carried out with assault boats. The greatest gallantry and skill was shown in this operation, both by the detachments evacuating from north of the river and by a battalion of 43 Division which assisted them; by 0600 hours on 26 September, when intense enemy fire made further crossings impossible, about 2,400 men of 1 Airborne Division, Polish Parachute Brigade, and 4 Battalion The Dorsetshire Regiment had been safely evacuated. Other detachments of the Dorsets were left on the north bank of the river still fighting in a most gallant manner to cover the operation.

Following the withdrawal from Arnhem, it became my immediate object to ensure the security of the Nijmegen bridgehead and to firm up the salient leading to it. By this time enemy reactions to our operation were fully aroused, and attacks against both salient and bridgehead were developing from every quarter.

The German troops were told that the Nijmegen road bridge was the 'gateway to the Fatherland' and that its destruction was essential to avert defeat. All available land and air forces were committed to the task. Between 19 September, when the Guards Division reached Nijmegen, and 4 October there were no less than twelve attacks of divisional or greater strength against the Eindhoven-Arnhem salient. Of these the strongest were delivered north-east from the Reichswald Forest on 28 September and south from Arnhem on 1 October. Both were directed on to the road bridge and both were repulsed, but only after some heavy fighting.

In these operations the enemy employed the remnants of 9, 116, 9 SS and 10 SS Panzer Divisions together with a very large force of infantry from the formations of Fifteenth Army and from locally organized battle groups.

In addition the enemy made a number of determined air attacks to put the Nijmegen bridges out of action, notably on 27 September, when nearly six hundred aircraft appeared over the area. These attacks fortunately failed, but he soon resorted to other methods. On the night 28/29 September, specially trained swimmers equipped with demolition charges seriously damaged the railway bridge and also caused the road bridge to be closed for twenty-four hours. A pontoon Bailey bridge was at once put under construction, and measures taken to frustrate further attempts by swimmers or floating mines.

Between the Waal and the Maas operations continued; north-east of Nijmegen, 30 Corps made ground east of Bommel and Elst, while 82 Airborne Division improved its positions east and south of Nijmegen itself and between 29 and 30 September repulsed four enemy attacks from the direction of the Reichswald Forest.

8 Armoured Brigade was fighting on the west sector of the bridgehead and disposed of an enemy force which had crossed the Neder Rijn. South of the Waal, Oss was occupied by our troops.

At the time that 8 Corps made contact with 30 Corps at St Antonis, patrols reached the Maas south of Boxmeer, and, to the west, entered Mill and Volkel. By the end of September the Corps was on the general line Weert-Meijel-Deurne-Boxmeer and thence along the Maas to the area of Cuijk, which was the point of contact with 82 Airborne Division.

West of the salient, 12 Corps continued operations in the Schijndel area. North of the town progress was made to the area Heesch-Dinther, and on 29 September the line of the Oss-'s Hertogenbosch railway was reached. Meanwhile the enemy held out stubbornly in Schijndel and Olland and counter attacked our troops at Best. The accompanying map shows the position in the Second Army salient on 30 September. At its narrowest part south of Grave, the corridor was only twenty miles wide, but we were now sufficiently well placed to ensure holding it firmly in spite of the increased enemy forces containing it.

REFLECTIONS ON THE BATTLE OF ARNHEM

The battle of Arnhem had been designed to gain us quickly and at relatively cheap cost a bridgehead beyond the Rhine (or Waal) and Lower Rhine (or Neder Rijn). It had had to be undertaken with resources which left very little margin for the insurance of success in view of the remarkably rapid recovery of the enemy, and at a time of year when it was necessary to accept considerable risks with the weather.

The plan involved initially driving a deep salient of over sixty miles into country occupied by a stubborn enemy, in which manoeuvre was very limited and observation restricted. It was necessary to rely on the weather permitting large scale airborne operations over a period of four days, in order to reinforce and link up the airborne detachments; we had also relied on a heavy scale of intimate air support, since the depth of the airborne operation carried it far beyond artillery support from the ground forces. It had moreover been assumed that the airborne divisions would be strong enough to dominate the enemy in their respective areas for a relatively lengthy period of time, because we were not strong enough, particularly in supporting weapons, to guarantee forcing rapid progress by major ground forces on a wide front from the Meuse-Escaut Canal bridgehead.

We had undertaken a difficult operation, attended by considerable risks. It was justified because, had good weather obtained, there was no doubt that we should have attained full success.

Had 1 Airborne Division received the planned measure of airborne reinforcement and re-supply, together with the full scale of support from the air, I am confident that the result would have been very different. In particular, I believe that the link-up with 1 Airborne Division would have been effected had it been possible accurately to drop the Polish Parachute Brigade on D+2 together with the Glider Regiment of 82 Airborne Division. At the same time the normal scale of action by the Allied Air Forces would not only have impeded the enemy pressing in on our Arnhem bridgehead, but would have greatly retarded the speed with which he was able to react and bring forward his reinforcements.

A great tribute is due to 1 Airborne Division for the magnificent stand at Arnhem; its action against overwhelming odds held off enemy reinforcements from Nijmegen and vitally contributed to the capture of the bridge there. Such reinforcements as did reach Nijmegen were forced to use a long detour to the east and a ferry crossing, and there is no doubt that the delays thus imposed were instrumental in enabling us to secure the Nijmegen bridges intact.

The battle of Arnhem was ninety per cent successful. We were left in possession of crossings over four major water obstacles including the Maas and the Waal, and it will later be seen that the Waal bridgehead proved a vital factor in the subsequent development of operations, culminating in crossing the Rhine and advancing to the Baltic. Full success at Arnhem was denied us for two reasons; first, the weather prevented the build-up of our airborne forces in the battle area; second, the enemy managed to effect a surprisingly rapid concentration of forces to oppose us. In face of this resistance the British Group of Armies in the north was not strong enough to retrieve the situation created by the weather by intensifying the speed of operations on the ground. We could not widen the corridor sufficiently quickly to reinforce Arnhem by road.

CHAPTER THIRTEEN

The Clearance of the Scheldt Estuary and Opening of the Port of Antwerp

REVIEW OF THE SITUATION AFTER THE BATTLE OF ARNHEM

WE had failed in our object of gaining quickly a bridgehead over the Lower Rhine at Arnhem, but the Nijmegen bridgehead over the Rhine itself gave us excellent strategic and tactical advantages.

It seemed likely that the enemy would now aim at stabilizing the northern front on the Waal, contesting our advance north of Antwerp and denying us the Scheldt estuary with all the means at his disposal, and at the same time concentrate on organizing a firm defensive system on our eastern flank to keep us remote from the Ruhr.

For 21 Army Group the prize remained the Ruhr. I continued to work on the problem of how best to thrust towards that area. During the winter months we were to suffer many delays and setbacks to the project, but it remained always the ultimate aim of 21 Army Group to cross the barrier of the Rhine and to develop operations for the isolation of the Ruhr. We had now the ability to strike south-east and south from the Nijmegen bridgehead, between the Rhine and the Meuse, towards the western extremity of the Ruhr; such a thrust combined with American operations directed on Cologne and Dusseldorf would clearly place the enemy in great difficulties. It was my idea that as we progressed along the west bank of the Rhine we should take any opportunity afforded us of jumping the river; if enemy opposition made this impossible, the Allies would be in a position to undertake an opposed crossing operation once we had cleared the sector between Dusseldorf and Nijmegen.

At the same time we could maintain a constant threat of resuming operations into southern Holland, which could be used to pin down enemy forces in the Arnhem sector.

The project of clearing the area between the Rhine and the Meuse, as a preliminary to striking at the Ruhr, I called the 'Battle of the Rhineland', and it now became my preoccupation to prepare and launch this operation as quickly as possible. The extent of the German recovery was increasingly apparent and to achieve our objects we were clearly destined to have another 'dog-fight' battle west of the Rhine. Additional strength was

necessary to overwhelm the enemy in the northern sectors of the Allied front and to ensure opening up again mobile operations on a decisive scale. The longer we delayed the greater would become the magnitude of the task before us, and in the last days of September I was hoping to be able to undertake the Rhineland thrust about 10 October.

While the battle of Arnhem was still in progress I was trying to accumulate additional forces for the offensive operations in the north, and asked the Supreme Commander for the inter-Army Group boundary to be changed in order to relieve 8 Corps from the long defensive flank on the east of the 30 Corps salient. On 22 September orders were given for moving the boundary northwards to the line Weert-Deurne-Maashees.

DEVELOPMENT OF THE PLAN OF OPERATIONS IN THE NORTHERN SECTOR UP TO THE END OF 1944

By the end of the first week in October, I realized that I should not be able to carry out my plans as speedily as I had hoped.

Apart from the major consideration of getting up to the Rhine and crossing it, there were three commitments facing 21 Army Group. We had to provide for the early opening of the Scheldt. I had hoped that the Arnhem operation would draw the enemy away from the front of First Canadian Army, but with the stabilization of the front in the northern sector, it was increasingly evident that the enemy would be able to provide considerable forces to cover the Scheldt estuary, and that we were going to have difficulty in clearing him out of the very difficult country astride that waterway. Meanwhile the American armies in particular were greatly hampered in their operations by lack of resources, and the solution of their difficulties lay in opening the port of Antwerp.

The second commitment was the need for additional strength in the Nijmegen bridgehead. The enemy continued to engage our forces there, and it was vital to ensure that we retained firmly our territory north of the Waal, because it was the springboard from which the Rhineland battle was to be developed and therefore the key to our future strategy in the north. I considered that two infantry divisions would be required in the bridgehead.

Thirdly, the enemy west of the Meuse on our eastern flank was in greater strength than had originally been anticipated, and he evidently intended to fight for his bridgehead; the country greatly favoured defensive tactics so that we should have to deploy some strength to push him east of the river. One American armoured division was sent to deal with the enemy in the sector west of Venlo, but experience quickly showed that it was insufficient for the task.

These three commitments had a direct bearing on future plans for the battle of the Rhineland. In view of the degree of the enemy's recovery, it was clearly unsound to advance between the Rhine and the Meuse with two hostile flanks and risk being hemmed in between those obstacles. We had to clear the west bank of the Meuse and ensure the opening of lateral routes across the river as the operation progressed to the south. Again, we had to be firmly balanced in the Nijmegen salient so that enemy action against the bottlenecks in rear of the Rhineland front could not divert us from our purpose. Lastly, we could not strike on an axis so remote from the Scheldt until we were certain that the operations there would proceed quickly and relentlessly and that there would be no sudden difficulties demanding reinforcements for the Canadian Army.

It is thus clear that we had not sufficient strength in the northern sectors to compete with our commitments concurrently. It was necessary to ensure balanced dispositions, and to devote first priority to opening Antwerp.

The battle of the Rhineland would have to wait. Apart from the considerations enumerated above, American action against Bonn and Cologne was, to my mind, an essential part of the Rhineland plan; but the First United States Army was not yet in a position to strike at the Rhine. The Americans were very heavily engaged in fierce fighting in the Siegfried Line round Aachen, and it was going to take time to break through the enemy defences in that area.

By 9 October, therefore, my immediate object had been reduced to completing the clearance of the Scheldt estuary and the undertaking of operations against the enemy bridgehead west of the Meuse. It was very soon necessary further to reduce the scope of our plans. The Allied need for Antwerp had become imperative; in 21 Army Group the administrative machine was working on a narrow enough margin, while in the American armies the maintenance situation had become extremely grave. To add to our difficulties, there was a gale in early October which had considerable repercussions on beach-working in Normandy. It became increasingly apparent that the enemy was determined to prevent our opening the Scheldt for as long as possible, and that if Antwerp was to be opened quickly we should have to deploy additional forces in our west flank operations.

It had thus become necessary to devote the whole of our resources into getting Antwerp working at once, and I had to shut down all other offensive operations in 21 Army Group until this object was achieved.

By the end of October completion of the clearance of the Scheldt estuary and of the operations directed to the mouth of

the River Maas was in sight, and I was then able to return to my plans for clearing the enemy salient west of the Meuse. When these operations had in turn been completed towards the end of November, I was able once more to concern myself with getting ready for the battle of the Rhineland. Preparations were in fact in hand when events again caused delay in execution of the operation: the German counter stroke in the Ardennes caused us to react strongly, and it was not until that situation had been cleared up that we were able to undertake operations towards the Ruhr from the Nijmegen bridgehead.

CANADIAN ARMY OPERATIONS

13-30 September

In mid-September First Canadian Army was commanding 1 Corps, which was relieving 12 Corps in the Antwerp area, and 2 Canadian Corps, which was operating in the coastal belt. The intention was for 1 Corps to advance north across the Antwerp-Turnhout canal, while 2 Canadian Corps cleared the country west of Antwerp up to the southern shores of the Scheldt estuary and at the same time invested Dunkirk and reduced the garrisons of Boulogne and Calais.

The enemy forces opposing the Canadian Army had by now split into two groups. Some 30,000 troops were left behind to hold the fortresses of Boulogne, Calais and Dunkirk, while farther north Fifteenth Army, with eight nominal divisions (worth about four) was withdrawing slowly across the estuary of the Scheldt.

A slow withdrawal was greatly facilitated by the canal barriers which lay across our path. The Canal de Ghent joins with Bruges and continues to the sea at Zeebrugge, the later stretch being called the Bruges Ship Canal. Farther north, the Leopold Canal runs from near Terneuzen to the North Sea north of Zeebrugge, while between these main arteries is the Canal de Derivation de Lys which runs from the sea parallel to the Leopold Canal for about twelve miles and then swings south-east to cross the Ghent Canal about ten miles west of Ghent. The Ghent-Terneuzen Canal runs north from Ghent to the West Scheldt, and parallel to the Scheldt itself there is the Canal de Hulst. These waterways were major obstacles, and between them existed a network of minor water lines and considerable areas of flooding.

4 Canadian Armoured Division had crossed the Ghent Canal and had cleared the Bruges area by about 12 September; the division then continued its advance towards the Canal de Derivation and the Leopold Canal and secured a small bridgehead over them on the night 13/14 September. There was considerable enemy

opposition and it was decided to reconnoitre the hostile defences along the canal lines in other areas in the hope of finding 'soft spots'. On 15 September a bridgehead over the Canal de Derivation was established near Balgerhoek, and in the following days the area west of the Ghent-Terneuzen Canal and north to the town of Sas Van Ghent was cleared. By 22 September the whole area south of the Leopold Canal, across which all the bridges were blown, was clear of the enemy, and in addition the pocket between the Terneuzen Canal and the Savojaards Plaat was also in our hands. Reconnaissance showed that the enemy was concentrating on holding the line of the Leopold Canal, and it became clear that additional resources would be necessary in order to continue the advance to the north.

The Polish Armoured Division relieved 7 Armoured Division in Ghent on 12 September and then moved to Lokeren and St Nicolas and northwards across the Dutch frontier. On 19 September a bridgehead was forced across the Canal de Hulst and on the following day Hulst and Axel were occupied. By 22 September Terneuzen had been taken, and the enemy was now confined to the Breskens 'island', which was formed by the area between the Savojaards Plaat, the Leopold Canal and the sea. The line of the canal was held by 4 Canadian Armoured Division, while the Poles moved east to join 1 Corps.

On 17 September 2 Canadian Division investing Dunkirk was relieved by 4 SS Brigade and moved to the Antwerp area, in connection with the relief of 12 Corps. It then undertook the clearance of the dock areas immediately north of Antwerp, and subsequently began to push north.

On 22 and 23 September patrols from 1 Corps had reached Herenthals and Pulderbosch, and on the next day Turnhout was occupied and a small bridgehead gained over the Antwerp-Turnhout canal south of St Leonard. In the following days this bridgehead was extended in face of strong opposition, and leading troops of 2 Canadian Division were brought round through the bridgehead with the object of swinging west and advancing towards the River Scheldt and the South Beveland isthmus. On 29 September Polish Armoured Division was brought up on the right of 49 Division and directed on Tilburg; Merxplas was captured on 30 September.

While the operations for clearing the banks of the Scheldt were developing, Boulogne and Calais were stormed.

The garrison at Boulogne was estimated at about 9,000 men. The defences ran along an irregular semi-circle of high ground, and a number of the main features had been turned into strong points with concrete emplacements, minefields and other defensive works. The attack on the fortress was delayed by bad weather,

and by the necessity to await the arrival of some of the special resources and medium artillery which were engaged in the Havre battle. During this waiting period some 8,000 civilians were evacuated from the town. The assault was launched on 17 September by two brigades of 3 Canadian Division supported by a great weight of artillery and air support. The battle for Boulogne lasted six days, chiefly because the hostile batteries and concrete strong points in many cases withstood our artillery and air action and had to be reduced in turn by the ground troops. On 22 September the garrison commander surrendered and the total prisoners amounted to 9,535. It is interesting to record that during the Boulogne fighting guns on the South Foreland near Dover engaged enemy batteries near Calais, and on 17 September a direct hit was scored on an enemy battery at a range of 42,000 yards.

The attack on Calais began on 25 September. The defences were of the same pattern as those at Havre and Boulogne and the defenders were assisted by batteries at Cap Gris Nez and Sangatte. It was necessary to deliver the assault on the west side of the town, owing to extensive flooding in other sectors. Some delays were caused by mines and inundations but the citadel fell and the town was entered on 28 September, when an armistice was granted for the evacuation of civilians. The attack was resumed at midday on 30 September and by the evening all organized opposition had ceased. The total prisoners amounted to some 10,000.

Canadian Army was now free to concentrate all its energies on the clearance of the Scheldt. In my instructions of 27 September I ordered General Crerar to proceed with all possible speed.

The right flank of the Army was to be brought up on the axis Tilburg--s Hertogenbosch in order to relieve Second Army of the defence of its long western flank. It was moreover important to push the enemy north of the Maas in order to establish a firm northern flank along the river as economically as possible.

Dunkirk continued to be invested and as Canadian Army pushed north the responsibility for this commitment was reverted to Army Group. The Czech Armoured Brigade took charge of the investing Forces.

INITIAL STAGES OF CLEARING THE SCHELDT ESTUARY

The task of clearing the Scheldt estuary involved the capture of three distinct areas: the Breskens 'island', the peninsula of South Beveland, and the Island of Walcheren.

In the Breskens 'island' there were heavy enemy coastal batteries at Breskens and Cadzand covering the approaches to the estuary, while on Walcheren there were some twenty-five

heavy batteries which could engage shipping in the Scheldt. The main strength of the enemy south of the estuary was provided by 64 Division, which included a high proportion of troops who had fought on the Russian front. The Walcheren garrison was from 70 Division, while in South Beveland there were elements of a divisional battle group, and between the isthmus and Turnhout we had identified 346, 711 and 719 Divisions.

The plan to clear the estuary was made in three main phases. First: the sealing off of South Beveland isthmus by a thrust from the Antwerp area together with the clearance of the Breskens 'island'. Second: the clearance of South Beveland by an advance along the isthmus in conjunction with a waterborne assault across the estuary from the south. Third: the capture of Walcheren by concentric assaults from the east, south and west, which entailed a second crossing of the estuary to seize Flushing and a sea-borne expedition from one of our Channel ports.

On 1 October 2 Canadian Division crossed the Antwerp-Turnhout Canal and thrust west towards the northern suburbs of Antwerp. Enemy resistance was spasmodic; by the evening of 4 October the Merxem-Eekeren area had been cleared and leading troops were within two miles of Putte, half way to the isthmus. Steady progress continued, but as the Canadians closed on their objective the opposition stiffened considerably and initial attempts to secure Korteven were unsuccessful. The enemy launched some counter attacks, but on 16 October the village of Woensdrecht was captured.

Meanwhile, on the right wing of First Canadian Army, 1 Corps continued its advance from the general line of the Antwerp-Turnhout Canal. Polish Armoured Division crossed the Dutch frontier north of Merxplas on 1 October and 49 Division was at this time fighting north of St Leonard. By 5 October leading troops were about four miles south of Tilburg and on the left were in Alphen. These advances were followed in the next few days by a number of enemy counter attacks along the length of the Corps front, all of which were successfully held. In the third week of October 4 Canadian Armoured Division was switched from the Leopold Canal sector to join 1 Corps, and 104 United States Infantry Division also moved up into the sector. From 20 October steady progress was made to the north and, by the evening of 23 October, 4 Canadian Armoured Division had crossed the Dutch frontier near Esschen and was swinging in towards Bergen-Op-Zoom. This manoeuvre, combined with the gradual reduction of the enemy positions round Woensdrecht, sealed off the South Beveland isthmus and opened the way for our troops to advance into the peninsula.

In the Leopold Canal sector 3 Canadian Division planned to

assault due north from Maldegem over the canal, while a brigade was to carry out an amphibious operation, landing in the north-east corner of the Breskens 'island'. The enemy positions on the north bank of the Leopold Canal were dug in on the reverse slope of the canal dyke and were therefore extremely difficult to neutralize with high explosive and small arms fire, and it was decided, after a series of experiments, to use flame throwers as a prelude to the attack. Early on the morning of 6 October the flame firing began and immediately it ceased attacking companies clambered over the dyke and launched their assault boats; on the right of the assault the canal was negotiated without undue difficulty, but severe losses were incurred on the left flank from machine gun fire. Nevertheless a footing was made on the far bank, and our troops held on during the day in spite of repeated counter attacks and heavy mortaring. On 7 October further reinforcements were with difficulty transferred to the north bank but still the bridgehead consisted only of a series of isolated detachments and it was clear that until the enemy pressure was reduced it would be impossible to construct Bailey bridges. It was in fact four days before bridging could be completed, and meanwhile the troops across the canal were maintained by assault boats, foot bridges and ferries. The enemy was now fighting desperately, and we subsequently learned that he sustained very heavy losses among his best fighting troops in trying to eliminate our Leopold Canal bridgeheads.

Meanwhile the amphibious operation got under way shortly after midnight on 8 October, and landed successfully some two hours later. Opposition was negligible and complete surprise was attained, but after daylight the Flushing battery and guns in the Biervliet area opened fire on the beaches and sea approaches and delayed vehicles already ashore from joining their units. By 0500 hours most of the Buffaloes used by the assault waves had turned round to collect the follow-up troops, who started to arrive on the beaches about 0900 hours. During the day enemy reaction stiffened, but the advance westwards continued along the coast while other detachments were pushed inland to the south-west. By nightfall the bridgehead was two to three miles deep. In view of the stiff nature of the fighting on the Leopold Canal, it was decided to reinforce the bridgehead with the primary task of swinging down along the western bank of the Savojaards Platt and opening a land route into the island. This was effected by the evening of 14 October when an axis was opened through the village of Isabella.

52 Division was now arriving in the theatre and came under command of Canadian Army. It took over the Leopold Canal bridgehead. The increased weight of our attacks, together with extremely effective support from the air, now began to quicken

the pace of operations, and on 22 October Breskens was captured and more than half the island was in our possession; clearance of the remaining area was left to 3 Canadian Division, while 52 Division began to prepare for the crossing of the Scheldt estuary.

SECOND ARMY OPERATIONS, 1-17 OCTOBER,
AND THE DECISION TO DIVERT ALL
RESOURCES TO OPENING ANTWERP

While Second Army operations were continuing in the last days of September to widen and strengthen the salient to Nijmegen, I issued orders for preparations to commence for the battle of the Rhineland. I was examining the possibility of launching the operation about 10 October. I was hopeful that the plans to open Antwerp would proceed quickly and that continuance of Second Army's operations would loosen the enemy facing the Canadian Army. On the right flank, First United States Army took over up to the new boundary on the line Hasselt-Weert-Deurne-Maashees, and despatched 7 United States Armoured Division to tackle the enemy west of the Meuse.

In accordance with my instructions Second Army commenced regrouping in the first days of October.

On the western flank the Germans made some withdrawal as a result of our progress north of Turnhout, but the area's Hertogenbosch-Schijndel-Olland-Boxtel-Tilburg remained firmly in enemy hands.

Meanwhile 7 United States Armoured Division started south from Overloon towards Venraij, but was unable to make much progress against the strong opposition.

The Situation, 7 October

At the end of the first week in October I had to inform the Supreme Commander that it was necessary to postpone the projected Rhineland attack, because my resources were not sufficient to enable me to continue with this plan in view of other more immediate commitments. The strength of enemy action against our Nijmegen bridgehead showed the necessity for a considerable reinforcement there to ensure its firm retention. Secondly, on the front of First Canadian Army there had been a very noticeable stiffening of enemy opposition, and our initial operations on the Leopold Canal indicated the enemy's determination to prevent us clearing the banks of the Scheldt. Thirdly, the efforts of 7 United States Armoured Division against the enemy bridgehead west of the Meuse gave indications of considerable strengthening in this sector. In spite of our withdrawal from the Arnhem bridge-

head, the enemy feared a further thrust north-east across the Neder Rijn, directed either at invading Germany itself or at reaching the Zuider Zee and cutting off Fifteenth Army. Apart from his desire to deny us Antwerp for as long as possible, these considerations obliged him to reinforce his front opposite 21 Army Group as much as his strained resources permitted. By 7 October there were about twenty weak divisions, or battle groups of comparable size, including four Panzer divisions, around our front from Roermond to Breskens. Their lack of armour and mobility was offset by the nature of the country, and we had to fight for every water crossing.

Behind this line the remnants of the Panzer, SS and parachute divisions were hastily reforming, but they were kept ready for action in case of a sudden Allied break-through or further airborne landings.

Towards the middle of October, the Panzer divisions left 21 Army Group front to meet a more pressing threat from First United States Army, but infantry resistance remained as dogged as before.

I therefore ordered that the offensive between the Rhine and the Meuse would be postponed and that our immediate objects would be to open Antwerp, using First Canadian Army, and to undertake the clearance of the enemy bridgehead west of the Meuse by Second Army.

Operations west of the Meuse, 12-17 October

The progress of the Canadian Army in the battle for the Scheldt has already been described. Meanwhile, in Second Army, 8 Corps was given the responsibility for launching a thrust from the Boxmeer area directed on Venraij; 7 United States Armoured Division was to co-operate in attacks eastwards from Deurne. After taking Venraij, the intention was to pass 11 Armoured Division through towards Venlo, while another thrust from the Weert area would be directed to the Maas in order to assault Roermond. The target date for this operation was 12 October.

8 Corps operation started as planned from the area north of Overloon; armour supporting the attack was held up by mine-fields, but the infantry succeeded in capturing Overloon by the evening. In the following days our troops slowly closed in on Venraij; the enemy fought doggedly in the thickly wooded country, and was greatly assisted by flooding and extensive use of mines and other obstacles. On 15 October it was decided to swing the main thrust to the right flank south-east of Rips, while 7 United States Armoured Division advanced along the general axis of the Deurne-Venraij road. Venraij was eventually occupied on 17 October.

The Situation, mid-October

The Allied drive to the Rhine had now virtually come to a halt. We had won a great victory in Normandy and had advanced north of the Seine on a broad front. Great successes had been achieved, but we had nowhere been strong enough to secure decisive results quickly.

The opposition along the whole front was hardening. In the central sectors, First and Third United States Armies continued to fight hard along the Siegfried Line from the Aachen area through the Ardennes to the region of Trier and southwards in the sector of the upper Moselle. Farther south, Sixth United States Army Group was deployed on the right of Twelfth United States Army Group and carried the area of operations down to the Swiss frontier.

The administrative situation was such that until Antwerp was opened the Allies would be unable to sustain further full-scale offensive operations, and, in view of the obvious difficulties we were going to have in dislodging the enemy from the Scheldt, we had clearly reached the stage when it was necessary to divert the entire resources of 21 Army Group to the task. On 16 October I issued orders shutting down all offensive operations in 21 Army Group except those concerned with the opening of the Scheldt estuary, and instructed Second Army to carry out immediate regrouping so as to bring its weight to bear on the west and to operate in conjunction with First Canadian Army.

My intention was for Second Army to thrust westwards initially towards 's Hertogenbosch and Tilburg, while Canadian Army transferred its weight farther to the left. The inter-Army boundary was changed to give the road Turnhout-Tilburg to Second Army. The two incoming divisions (52 and 104 United States) had been allotted to Canadian Army to increase its resources.

Second Army planned to develop its maximum offensive power in a strong thrust on the general axis 's Hertogenbosch-Breda, with the right flank on the Maas. Its objective was the general line Moerdijk-Breda-Poppel. Meanwhile Canadian Army was to make every effort to accelerate its operations in South Beveland and against Walcheren, and with its right flank was to thrust northwards from the Antwerp-Turnhout Canal towards Breda-Roosendaal-Bergen-Op-Zoom. I intended not only to clear up the Antwerp situation with all possible speed, but also to push the enemy back across the Maas in order to establish a firm and economical northern flank along the river. I hoped that, as Second Army operations developed, the enemy opposite Canadian Army would weaken in face of the threat to the main escape routes to the north.

As the weight of Second Army was switched into the 12 Corps sector on the west, 8 Corps operations in the Venraij area were brought to a halt.

COMPLETION OF THE CLEARANCE OF THE SCHELDT

For the sake of clarity I will now describe the operations of 2 Canadian Corps which were directly concerned with clearing the banks of the Scheldt, before dealing with other operations which were concurrently pushing the enemy north of the Maas.

It has already been seen that troops of 2 Canadian Corps captured Woernsdrecht at the approaches to the neck of the Beveland isthmus on 16 October; by 23 October the action of 4 Canadian Armoured Division, coming up on the right of 2 Canadian Corps, made it possible to swing troops into the isthmus with a secure flank to the north and north-east.

Early on 24 October 2 Canadian Division began its advance along the isthmus, but progress was inevitably very slow owing to the extremely difficult nature of the country. There were large areas of flooding, particularly at the approaches to the Beveland Canal, and existing roads were cratered and mined. The Canadians forced their way westwards, often waist deep in water, and by 25 October had reached a line running north and south through Rilland. On the following day they were only six miles short of the Beveland Canal. Meanwhile on the night 25/26 October a brigade of 52 Division sailed from Terneuzen, in Buffaloes and LCAs, to make an assault landing near Baarland. On the westernmost beach the troops got ashore without opposition, but on the east there was some shelling which caused casualties to craft; a squadron of DD tanks safely negotiated the Scheldt, but the mud flats and dykes prevented them from accompanying the infantry inland. In spite of counter attacks the bridgehead was extended to Oudelande and beyond.

On 27 and 28 October while operations from the bridgehead continued, leading troops of 2 Canadian Division reached the Beveland Canal and found the bridges blown, but during the night 27/28 October a crossing was forced, and by noon the following day a Class 9 Bridge was opened near Vlakte. By this time 4 Canadian Armoured Division had captured Bergen-Op-Zoom, thus strengthening the base of the 2 Canadian Division operation.

The clearance of South Beveland continued rapidly in spite of all difficulties and on 30 October the east end of the causeway carrying the road and railway across to Walcheren Island was reached. South Beveland was now clear of the enemy, and, in

order to avoid any possibility of the enemy holding out in North Beveland, a column was despatched to clear that island.

Meanwhile operations in the Breskens 'island' had continued successfully and, by the evening of 1 November, Cadzand and Knocke were in our hands and it remained only to clear the area between the Leopold Canal and Zeebrugge. Early on 3 November the last enemy pockets were eliminated and the whole of the southern bank of the Scheldt Estuary was in our hands. In four weeks' fighting, which was as fierce as any we had yet experienced in north-west Europe, First Canadian Army had taken 12,500 prisoners and accounted for many enemy dead and wounded.

It now remained to clear the island of Walcheren.

The defences of this island were primarily sited to cover the entrance to the West Scheldt and to prevent a seaborne landing on the west side of the island. There was a number of heavy coastal batteries, many of them housed in concrete emplacements, while on the west and south the defences included under-water obstacles and extensive wiring and mining of the beaches and beach exits. Flushing had a perimeter defence system with a double line of anti-tank ditches.

The strength of the island garrison was estimated at between 6,000 and 7,000 men and it was clear that its reduction presented an extremely difficult problem. The nature of the terrain, which was closely intersected by dykes and steep banks, did not offer scope for an airborne landing and it was eventually decided that the most effective way to capture the place quickly would be to 'sink' it: by breaching the sea dykes which ran round its circumference. If the dykes could be broken, it was believed that many of the enemy artillery positions would be rendered untenable and the movement of enemy troops would be restricted; moreover, if the breach were large enough, assaulting forces could be launched into the island in their own amphibious craft and would thus be able to take the defences in rear.

Early in October Bomber Command carried out an operation of truly magnificent accuracy, as a result of which the sea dykes were breached at four points on the island. The gaps were improved by further attacks during the month and the island was gradually flooded so that at the end of October it resembled a saucer filled with water. The most important gap was 380 yards wide in the dyke near Westkapelle. The precision and weight of the Royal Air Force operation may be gauged from the fact that at Westkapelle the dyke was 330 feet wide at its base and about 30 feet high above the low water mark.

It was planned to make two seaborne landings on Walcheren by troops conveyed and supported by Force 'T' of the Royal Navy; one force was to move from Breskens to secure Flushing,

while the second, mounted from Ostend, was to assault the Westkapelle area, passing into the island through the breach in the dyke. The latter force was subsequently to operate along the dunes in order to link up with the Flushing attack, and was also to send detachments northwards along the coast. In conjunction with the seaborne assaults an attack was to be made across the South Beveland causeway.

Operations began on 1 November. Early in the morning Commando troops landed near Flushing and reached the water front without heavy casualties. They were followed by troops of 52 Division, and the attack was developed into the town. Meanwhile the Westkapelle force approached the coast supported by naval units; it had been planned to provide heavy air attacks as a preliminary to the assault, but weather over the home airfields limited the air effort to Continental-based units, which pressed home a determined attack just as the assault troops were about to land, and had a profound effect on the operation at a time when the support craft were suffering heavy casualties.

The Naval support programme included action by a bombardment squadron, consisting of HM Ships Warspite, Roberts and Erebus, and by various types of support craft. The latter closed in to the coast and engaged enemy batteries at point blank range and were mainly responsible for the assault troops reaching the beaches with comparatively few losses; the support craft themselves, however, suffered severely in the process.

On the east of the breach a Commando quickly secured the major strong points and by evening had advanced two miles in the direction of Flushing, while on the left another Commando negotiated the gap in the dyke, dismounted, and captured Westkapelle. Later in the day the advance was continued towards Domburg.

Meanwhile on the causeway, the Canadians made some minor initial progress but were subsequently forced back.

On 2 November Flushing was captured after hard fighting, and on the following day a link up was made with the Westkapelle force, which had reduced the enemy batteries along the dunes, and had already reached Domburg in the north. On the causeway, 52 Division took over from 2 Canadian Division, and hard fighting continued. Eventually an assault crossing was made over the Slooe Channel, about two miles south of the causeway, and a bridgehead secured which was eventually linked with the causeway itself.

From 3 November the reduction of Walcheren became a problem of mopping up many enemy parties marooned in the island, a process which was completed by 8 November. The total number of prisoners taken was about 8,000.

Meanwhile one of the most intricate minesweeping operations

of the war had been put in hand. On 4 November the first mine-sweeper ships reached Antwerp and in the next three weeks one hundred craft were employed clearing the seventy-mile channel, which had to be swept sixteen times. On 28 November the first convoy was safely berthed at Antwerp and the port was opened for the maintenance of both American and British Armies.

It was now possible to commence full stocking of the Advance Base in Belgium. Up to this time the depots were fed with commodities brought in by road and rail from the Channel ports and from the Rear Maintenance Area in Normandy.

There were between 300,000 and 400,000 tons of stocks in the Rear Maintenance Area alone, and 100,000 personnel were employed there. It was decided that once Antwerp was opened, the Rear Maintenance Area should begin closing down, leaving the commodities no longer required by us to be handed over to the War Office for disposal.

The opening of Antwerp also enabled us to close some of the Channel ports and thus release key personnel and transportation resources for the establishment of the Advance Base in Belgium. It was planned that Antwerp could accept 40,000 tons per day exclusive of petrol, oil and lubricants; of this total 22,500 tons were allotted to the American forces. There was ample capacity for bulk petrol and the installations were shared by the Americans and ourselves.

The only anxiety at Antwerp was due to the 'V' bomb and rocket attacks which were soon developed by the enemy. Great credit is due to the excellence of the American and British anti-aircraft units which accounted for an exceptionally high percentage of the V1 projectiles, and to the military personnel and Belgian civilians who worked under the strain of the continual attacks.

CLEARING SOUTH-WEST HOLLAND TO THE LINE OF THE RIVER MAAS

As already explained, while Canadian Army was clearing the banks of the Scheldt, 1 Corps on its right wing, together with 12 Corps of Second Army, were engaged in clearing south-west Holland up to the River Maas; at the same time 1 Corps was protecting the right flank of 2 Canadian Corps operating in Beveland and Walcheren.

1 Corps advanced on 20 October with Polish Armoured Division on the right, 49 Division in the centre and 4 Canadian Armoured Division on the left. The right and centre were directed to the general line exclusive Tilburg-Breda-Roosendaal, while 4 Canadian Armoured Division advanced on Bergen-Op-Zoom.

On 22 October 12 Corps launched its attack west of the general

line Oss-Veghel-St Oedenrode-Best, directed initially on 's Hertogenbosch and Tilburg. The three enemy divisions on the front were reinforced by 256 Division the day before our attack started. 12 Corps plan was to advance to 's Hertogenbosch with 7 Armoured and 53 Divisions, which were to be followed up by 51 Division; on the left, 15 Division was to clear the area to the south and capture Tilburg.

Operations were impeded by widespread minefields, but there was very little enemy artillery fire; 51 Division reached the vicinity of Schijndel on the morning of 23 October and the following day 53 Division was in the outskirts of 's Hertogenbosch. The main road to Eindhoven was cut and Boxtel was captured, but the enemy held out in some strength covering Vught. Meanwhile, 15 Division made good progress through Oirschot.

On 1 Corps sector, 104 United States Infantry Division came into the line in the centre, between the Poles and 49 Division. The advance continued steadily and by 27 October the Poles had occupied Gilze and cut the Tilburg-Breda road. On their left the Americans repulsed a sharp counter attack from Zundert on 26 October and captured the town the following day. At the same time 49 Division was two miles south of Roosendaal, and 4 Canadian Armoured Division occupied Bergen-Op-Zoom. In the last days of October 12 Corps was through 's Hertogenbosch and across the canal west of it, had captured Vught and moved on towards Loon-Op-Zand, and Udenhout had been occupied. 15 Division completed clearing Tilburg on 28 October.

It is now necessary to turn to the enemy salient west of the River Meuse.

With the object of unbalancing us and relieving the pressure in the western sectors, the enemy launched a spoiling attack on 27 October against 8 Corps. The Germans employed 15 Panzer Grenadier and 9 Panzer Divisions to help the parachute formation already in the sector, and thrust across the Noorer Canal at Nederweert and over the Deurne Canal between Meijel and Liesel. The main weight of the attack fell on 7 United States Armoured Division; the enemy made some progress and captured Meijel and subsequently reached an area two or three miles farther west along the road towards Helmond. To seal off this penetration, 15 Division, which had now completed its Tilburg operation, was transferred to the sector together with a tank brigade. 51 Division followed, as it also became pinched out on the 12 Corps front. By 30 October the position had been stabilized.

The final stages of the 1 and 12 Corps operations were soon completed. 7 Armoured Division struck west towards Oosterhout and made contact with the Poles thrusting from the south on 30 October. Patrols pushed north to Geertruidenberg. The following

day hard fighting took place in Raamsdonk, where the enemy was making a stand in order to cover the Pereboom bridge as long as possible. By 1 November, 12 Corps task was completed except for the clearance of the area between Afwaterings Canal and the Maas; 51 Division carried out this task by 5 November.

Meanwhile 1 Corps advanced quickly across the Tilburg-Bergen-Op-Zoom road. On 29 October Breda fell, and the Americans reached Oudenbosch on the following day. 49 Division cleared Roosendaal and 4 Canadian Armoured Division, after overcoming some stubborn resistance north of Bergen-Op-Zoom, was about one mile south of Steenberg. The enemy's attempt to form a last line south of the Maas was along the River Mark, across which 1 Corps established crossings on a wide front, despite enemy counter attacks designed to cover his troops withdrawing across the Moerdijk bridges. Geertruidenberg was taken on 4 November by the Poles, and within four days the enemy had been cleared from the last pocket south of the Maas. Tholen and the St Philips-land peninsula were reported clear and patrols visited Schouwen.

The enemy's withdrawal from south-west Holland had been very greatly facilitated by the adverse flying weather. Under cover of mist and low clouds he had escaped the inevitably heavy punishment which, in more favourable conditions, our Air Forces would have given him. The total prisoners taken in this phase of the operation were about 8,000.

CHAPTER FOURTEEN

Preparations for the Battle of the Rhineland. The Clearance of the West Bank of the River Meuse

DISCUSSIONS ON THE DEVELOPMENT OF ALLIED PLANS

The Brussels Conference, 18 October

WHILE the battles of the Scheldt and south-west Holland were progressing, discussions continued concerning the development of Allied plans. On 18 October the Supreme Commander held a conference in Brussels with General Bradley and myself. We discussed the situation on the Allied front and plans for the future. My opinion was that the situation bore a close resemblance to that existing in Normandy before we broke out of the bridgehead. It seemed to me that the decisive battle for Germany might well be fought west of the Rhine, just as the battle for France was fought south of the Seine; since, however, the Germans obviously were determined to hold us back from the Ruhr with all the means at their disposal, the battle of the Rhineland would not be won easily. We would require to deploy great strength in order to ensure its success.

As I saw our problems, the Ruhr remained the objective of highest value. Having defeated the enemy in the northern sector and having seized this vital industrial region, it remained in the spring to develop mobile warfare into the heart of Germany across the North German plains.

The main conclusions reached at the conference were that 21 Army Group should continue its operations to open the port of Antwerp as quickly as possible, and should subsequently launch an attack south-eastwards from the Nijmegen bridgehead towards Krefeld. Meanwhile First United States Army was to advance to the Rhine about Cologne and gain a bridgehead over the river, starting early in November. Ninth United States Army, which was now operational, was to operate on the left flank of First United States Army during the advance to the Rhine, and subsequently attack northwards between the Rhine and the Meuse, in order to meet the Second Army offensive driving southwards; during the latter stage Ninth United States Army was to pass to command of 21 Army Group. It was further decided that Twelfth United States Army Group would be responsible for commanding the operations to capture the Ruhr, and that 21 Army Group would

examine the possibility of thrusting northwards over the Neder Rijn towards the Zuider Zee.

It was thus agreed that the battle of the Rhineland should consist of two converging offensives: one from the Nijmegen bridgehead southwards, the other from the left flank of Twelfth United States Army Group northwards. The basic essential now was to deliver these thrusts in overwhelming strength in order to write off the German forces in the northern sector of the Rhineland and to burst across the Rhine north of the Ruhr.

The Situation, 31 October

In the last days of October it became apparent that the Allies were not in a position to implement the plan of 18 October as speedily as had been hoped.

The situation in the 21 Army Group sector showed that the opening of the Scheldt was now in sight, and that in a short time we should have our northern flank established along the line of the Lower Maas. On the other hand, with the object of diverting us from the western sector, it has been seen that the enemy launched an attack in some strength on our eastern flank. It was evident that the Germans were quite determined to hold on to their bridgehead west of the Meuse so that it would constitute an embarrassment to our Nijmegen salient. As long as this threat remained in strength it was clearly unsound to launch Second Army into the battle of the Rhineland.

If the American thrust to Cologne developed quickly and in great strength, I had hopes that it would draw off the enemy from his Meuse bridgehead. On 31 October General Bradley and I discussed the situation; he told me that owing to his 250-mile front, and requirements for offensive operations against the Saar, the number of divisions available for the First United States Army thrust to Cologne was not as great as might have been hoped. From this I deduced that the operation might not result in the desired thinning out of the enemy west of the Meuse, and that therefore operations on a considerable scale might have to be undertaken in order to push the enemy east of that river.

The prerequisites for launching the battle of the Rhineland were now the elimination of the enemy bridgehead west of the Meuse and the release of Ninth United States Army for the offensive from the south. The latter was dependent upon the completion of the Twelfth United States Army Group attack on Cologne, and it was therefore logical that 21 Army Group should do all in its power to assist this American offensive and at the same time undertake the clearance of the west bank of the Meuse.

Revised plans were agreed by the Supreme Commander on 1 November. Having completed operations on the western flank, 21 Army Group was to regroup and line up along the River Meuse, and was to extend its flank to the south in order to take over additional territory from the Americans; at the same time the American divisions serving in the British sectors were to be returned to Twelfth Army Group. As far as resources permitted we were to develop offensive operations on the immediate flank of Twelfth Army Group in order to assist directly its operations towards the Rhine.

I issued orders on 2 November to give effect to these decisions. As soon as the Scheldt and south-west Holland operations were completed, First Canadian Army was to take over our northern sector as far east as Middelaar, which included assuming responsibility for the Nijmegen bridgehead. Second Army was to line up facing east for the drive to the line of the Meuse, and the target date for the commencement of these operations was 12 November. By 15 November I intended to extend our flank to the south as far as Geilenkirchen exclusive. Second Army would then undertake offensive operations in conformity with Ninth United States Army. 82 and 101 United States Airborne Divisions, together with the American 7 Armoured and 104 Infantry Divisions, were to be returned to Twelfth Army Group as soon as possible.

General Dempsey planned to face the Meuse with 8 Corps in the north, 12 Corps in the centre and 30 Corps in the south. On 9 November 2 Canadian Corps relieved 30 Corps in the Nijmegen bridgehead; the latter moved south and as it came into position took over the left sector of Ninth American Army as far as the River Wurm, south of Geilenkirchen. At the opposite end of the Army Group front, 1 Corps was made responsible for the line of the Maas from about Oss to the sea and as far west as Walcheren.

I provided in my instructions that when the time came, First Canadian Army would be responsible for launching the northern offensive of the battle of the Rhineland, and intended that subsequently Second Army would undertake the forcing of the Rhine.

PREPARATIONS FOR THE BATTLE OF THE RHINELAND

I refer to Second Army operations for the elimination of the enemy bridgehead west of the Meuse as the 'Preparations for the Battle of the Rhineland'.

Our front ran roughly along the Wessem Canal from about ten miles north of Maeseyck, across the front of Weert, and then

followed the Noorer Canal to the enemy salient round Meijel. The line then joined the Deurne Canal north of Meijel and later swung north-east to Veulen, Venraij and Maashees. The enemy territory was completely flat and largely waterlogged, and the only three roads of any consequence converged on Venlo. We had to expend very considerable engineer resources in order to establish communications capable of carrying military traffic in the area.

The Second Army plan provided for operations by 8 Corps in the north, including the occupation of Meijel, while 12 Corps advanced from the line of the Wessem Canal on Venlo, with its right flank on the River Maas and its left on the Noorer Canal.

12 Corps started on 14 November, when troops of 53 and 51 Divisions secured bridgeheads across both the Wessem and Noorer Canals, while 7 Armoured Division secured the locks at Panheel, giving us control of the canal waters. The enemy was not particularly strong on the ground, but had sown very extensive minefields in order to delay the advance, and the extremely difficult muddy country, coupled with unusually bad weather, precluded rapid progress. On 16 November patrols reached the next major water obstacle, the Zig Canal, with main bodies a few miles behind; this manoeuvre closely threatened the enemy positions about Meijel and on the same day the town was occupied by troops of 8 Corps. On the right flank, troops closed on the perimeter defences of Roermond and cleared the villages on the left bank of the Meuse. Once across the Zig Canal, Panningen was soon occupied. 8 Corps made a successful crossing of the Deurne Canal and thrust towards Sevenum, while other columns attacked south from the Venraij area. On 22 November both Sevenum and Horst were captured, and by the same date our troops had completed the clearance of the west bank of the river opposite Roermond.

At the end of the month the last enemy position west of the river in 8 and 12 Corps sectors was at Blerick. On 3 December a set piece attack was delivered against the strongly developed defences of this place. Flail tanks cut lanes through the wire protecting the anti-tank ditches across which assault bridges were launched. The lanes were then developed through the minefields while infantry followed up closely in Kangaroos. Once within the defences the infantry dismounted and quickly overwhelmed the enemy garrison. By nightfall the place had been cleared.

SECOND ARMY OPERATIONS IN THE GEILENKIRCHEN
SECTOR

18-24 November

30 Corps held the front between the River Wurm and the River Meuse, with 43 Division on the right and Guards Armoured Division on the left; on the immediate right of the Corps was 84 United States Infantry Division.

In conjunction with Ninth United States Army operations on the northern flank of the main American thrust to Cologne, it was arranged that 30 Corps should deliver an attack in the Geilenkirchen sector. 84 United States Division came under operational command of 30 Corps for this purpose, and on 18 November attacks were launched with the intention of capturing Geilenkirchen and working north along the valley of the Wurm.

Geilenkirchen itself was enveloped and captured, but after a few days further progress was halted. Heavy rain made the ground almost impassable to both tanks and wheeled vehicles. Our advance was running along, not through, the Siegfried Line and the reduction of its defences, though not difficult, was laborious; moreover, the enemy made strong counter attacks with two fresh divisions, 15 Panzer Grenadier and 10 SS, which were rushed to the sector. 30 Corps, therefore, reverted to the defensive, and 84 United States Division returned to command of Ninth United States Army on the night 23/24 November.

UNITED STATES ARMY OPERATIONS DURING
NOVEMBER 1944

After a series of postponements due to the exceptionally bad weather, Twelfth Army Group attack on the general axis Aachen-Cologne began on 16 November. After some extremely hard fighting in which both sides lost heavily, the American attacks were halted on positions overlooking the Roer valley. Progress was costly and hindered by the same difficulties which had beset 30 Corps farther north; the weather was extremely bad, the ground was often impassable and the enemy produced considerable reinforcements. During the period 16 November-1 December no less than eleven infantry and five Panzer divisions were committed on the Roer valley front. In addition, in reserve between the Roer and the Rhine, the enemy had now formed up Sixth SS Panzer Army in an arc covering Cologne, and was considerably assisted by the floods in the Roer valley and his ability to control the flow of water from the system of dams higher up the river. General

Bradley therefore decided that operations to force a crossing of the River Roer were impracticable until the dams were in his possession.

Farther south, Third United States Army commenced its offensive towards the Saar on 8 November, and by the end of the month had captured the formidable defences of Metz and reached the line of the River Moselle. In the extreme south Sixth United States Army Group had advanced into Alsace-Lorraine. Seventh United States Army had captured Strasbourg and turned north towards Karlsruhe, while First French Army reached the Rhine between the Swiss frontier and Mulhouse. The enemy continued to hold a substantial bridgehead west of the Rhine in the Colmar area.

REVIEW OF THE SITUATION IN EARLY DECEMBER

The weather throughout November had been exceptionally bad; not only had operations of the Allied Air Forces been considerably restricted, but progress on land in the flat waterlogged country had been extremely difficult. On 2 December the enemy breached the southern bank of the Neder Rijn west of Arnhem and inundated part of our bridgehead; the low lying ground to the south of Arnhem was quickly flooded as far as the railway running west from Elst, and Canadian Army was forced to withdraw to this line. Fortunately we retained a bridgehead adequate to cover the Waal bridges, but the possibility of attacking north to secure the high ground between Arnhem and Apeldoorn was now out of the question.

On the Allied front north of the Ardennes we were now 'tidy' along the line of the Rivers Roer and Meuse except for an enemy salient in the Heinsberg area, and virtually the only commitment remaining as a preliminary to major operations between the Rhine and the Meuse was the elimination of this pocket. I ordered Second Army to carry out the clearance of the Heinsberg area in early December, but eventually operations had to be postponed owing to the complete saturation of the countryside. Meanwhile 21 Army Group commenced regrouping for the Rhineland battle, and it was arranged that Ninth American Army would accept the commitment of the Heinsberg salient, receiving 7 British Armoured Division under command. This enabled me to speed up the regrouping, since I required Headquarters 30 Corps for the assault against the Reichswald Forest. While the Americans took over the right sector of 30 Corps, the balance of its commitments was transferred to 12 Corps and the plan was drawn up for concentrating Headquarters 30 Corps, Guards Armoured, 15, 43 and 53 Divisions, together with associated armoured brigades, in the

Nijmegen bridgehead; the target date for the thrust towards Krefeld was 12 January, and by 16 December advance parties were on the move to their concentration areas in the north. While Canadian Army was preparing for this new thrust, Second Army undertook the study of the Rhine crossing and placed in hand the development of east-west routes up to the Meuse, which would later be developed across the Rhineland.

This was the situation when, on 16 December, the enemy launched his counter offensive in the Ardennes sector.

CHAPTER FIFTEEN

The Battle of the Ardennes

THE ENEMY SITUATION, DECEMBER 1944

FOLLOWING the battle of Normandy the enemy was faced with two main problems: the re-formation of a front and the prevention of the Allied invasion of Germany.

During October and November the second preoccupation remained and accounted for the very bitter resistance to the American offensive in the Roer valley. The enemy also realized that the creation of an armoured strategic reserve was essential, because the rate of destruction of his resources in the winter battles, if allowed to continue, would result in the complete exhaustion of his armies by the spring, so that the Allies would be able to cross the Rhine and invade Germany with ease.

Benefiting from the autumn and winter weather which slowed down the pace of operations, the enemy began to refit his strategic reserve. Allied pressure, or the threat of it, first by 21 Army Group at Arnhem in September and October, and later by the Americans at Aachen in November and December, forced him to keep more than half of his total fifteen Panzer divisions in the west almost permanently engaged in battle. He did, however, manage to refit eight of them by December, including the bulk of the SS; these divisions were re-equipped to the scale of about one hundred tanks each, comprising the latest types of Panther and Tiger.

It will be remembered that late in August the enemy's armies fleeing north-east were rated at about the equivalent of twenty-three divisions; by mid-December the Germans had managed not only to re-form the front and limit the invasion of Germany to minor areas, but also to increase his field force to some seventy divisions. Even assuming that Allied operations continued with intensity throughout the winter, it was estimated that this force would increase to ninety divisions by 1 March.

THE BATTLE OF THE ARDENNES

Such was the German military situation on the western front when for the second time during the campaign a reserve was to be pledged in a major gamble. Hitler himself ordered that his western armies were to be formed up for a last desperate attack

43, 51 and 53 Divisions together with three armoured brigades. The situation remained unpleasantly vague and I undertook emergency measures to get reconnaissance troops down to the line of the Meuse and to assist in forming effective cover parties for the Meuse bridges between Liege and Givet. Detachments of SAS troops and Tank Replacement Centre personnel were sent to the river in the Namur-Givet sector, while armoured cars of Second Army established patrol links between Liege and Namur. 29 Armoured Brigade, which was then re-equipping in western Belgium, was ordered to pick up the tanks it had recently discarded and concentrate by forced marches in the Namur area.

During 19 December enemy armour penetrated as far as Hotton, Marche and Laroche, and the gap in the Allied line appeared to extend from Durbuy to Bastogne. I could see little to prevent German armoured cars and reconnaissance elements bouncing the Meuse and advancing on Brussels; during the night, therefore, hastily formed road block detachments were posted round the capital. As 30 Corps moved with all possible speed into its new concentration area, and our detachments were assisting in the establishment of bridge guards between Liege and Givet, the enemy's opportunity of rushing the river diminished; once 30 Corps was in position we should be able to intervene, if required, in throwing back any hostile bridgeheads established over the Meuse.

Meanwhile, on the night of 19 December, General Eisenhower instructed me to take command on the following day of the American Armies (First and Ninth) north of the German salient; the depth of the enemy penetration had put these formations remote from the Twelfth United States Army Group axis and made their control by that Headquarters extremely difficult. I at once visited General Simpson (Ninth Army) and General Hodges (First Army). Clearly the first problem before us was to halt the enemy advance and oppose it with a firm front in conjunction with Twelfth Army Group to the south; this demanded certain regrouping, behind which we had 30 Corps ready to hold the line of the Meuse. The next process was to create a reserve corps in First United States Army available for offensive operations, and I decided to assemble VII American Corps under General Collins on the right flank of First Army with four divisions. Since these formations would have to be withdrawn from the battle, the process was obviously going to take a little time. The question arose of the possibility of employing British divisions south and east of the Meuse; this was a very difficult matter, because their administrative axes would run directly across the maintenance routes of both First and Ninth United States Armies, and it would therefore be extremely difficult to avoid congestion.

On 20 December the Supreme Commander instructed Sixth United States Army Group to extend its front to the north as far as Saarlautern and to remain on the defensive. Twelfth Army Group was to concentrate in the area Luxembourg-Bastogne in order to counter attack against the southern flank of von Rundstedt's salient, while the Armies under my command were to launch as soon as practicable a thrust against the northern shoulder of the salient.

American detachments holding out south-east of Vielsalm were drawn into reserve west of the town, and the assembly area selected for VII American Corps was north-west of Marche.

Meanwhile the German attacks continued with unabated fury, but almost from the outset the enemy plan miscarried, though the threat remained formidable. Sixth SS Panzer Army was attempting to breach the American line in the Malmedy-Stavelot sector using 1 SS Corps; it was then intended to push this formation through to Liege or to bring 2 SS Corps through the breach for the purpose. For a whole week 1 SS Corps spent itself in fruitless attempts to make a hole; finally, the frontal attack having failed on 22 December, 2 SS Corps was swung west to try and break through to Liege from the south via Durbuy. Meanwhile Fifth Panzer Army was heading west and north-west for the Meuse, by-passing Bastogne on the way. Although on 19 December there was still no strong Allied formation between Fifth Panzer Army and the Meuse, the German advance was too slow, for they should have seized crossing places over the river at once. When they tried to do so later their dispersed spearheads were too weak, and were either cut off and destroyed or forced to regroup for properly organized attacks. A vital contribution to this slowing down of the enemy advance was the dogged resistance by isolated American groups at main nodal points, particularly St Vith and Bastogne, which severely congested enemy traffic by forcing it into lengthy detours and caused very considerable diversion of enemy resources.

As 2 SS Corps began to feel to the west in order to outflank First Army in the Hotton-Marche area, it began to come in contact with VII United States Corps forming up in its new area. The divisions of this Corps, intended as reserves, thus became engaged in the battle. Still farther west the Germans came in contact with 29 British Armoured Brigade covering the Namur-Dinant sector. On 23 December enemy tanks were reported only twelve miles east of Dinant, and during the following two days armoured engagements in the general sector of Ciney took place between enemy spearheads and 2 United States Armoured Division and 29 British Armoured Brigade. The latter Allied formations made contact on 25 December in the area of Celles, where fighting

took place only four miles from the river and considerable casualties were inflicted on the enemy.

By Christmas the enemy offensive had been sealed off within the general line Elsenhorn-Malmedy-Hotton-Marche-St Hubert-Bastogne, and all routes to the Meuse were blocked.

In the south, Third United States Army attacked towards Bastogne, where American troops, although surrounded, made a magnificent stand against tremendous enemy odds; General Patton's forces eventually relieved Bastogne on 26 December.

A factor of vital importance to the Allies was that a period of good weather commenced about 24 December and the great weight of the Allied Air Forces was deployed in checking the enemy advance; our aircraft did tremendous execution in the enemy salient and behind it, and this factor, together with the outstanding fighting qualities of the American troops, enabled the Allies gradually to turn the tide. It had not yet, however, been possible to form a reserve American corps available for offensive operations in First Army, and I now decided to commit British troops south and east of the Meuse in order to relieve VII United States Corps for the purpose. My plan was to employ 30 Corps on the right flank of First United States Army, taking over the sector Givet-Hotton. These reliefs were to be completed by 2 January so that VII United States Corps could thrust towards Houffalize on 3 January. Meanwhile Third United States Army continued its operations in the Bastogne sector and was widening its salient there. General Patton's thrust line was also directed on Houffalize, so that our respective offensives could join up and pinch out the head of the enemy salient.

After the clear weather over the Christmas period, which had proved so much to the advantage of the Allied Air Forces, the German Air Force made a decided attempt to neutralize our air effort by an all-out attack on the Allied airfields. Deploying the greatest concentration of aircraft employed in the campaign, a daring low level attack was carried out on 1 January against our main airfields in Belgium and Holland. These attacks succeeded in causing considerable losses to the Allies, but they were in no way comparable with those suffered by the enemy.

First United States Army launched the attack by VII Corps on 3 January. The enemy was well organized with dug-in tanks and anti-tank guns, and the weather was again bad, with visibility reduced to two hundred yards or less. Advances of two to three thousand yards were made, however, on the first day, after which heavy snowfall brought progress to a halt. The advance was resumed on 5 January, and two days later the Laroche-Vielsalm road was cut south-east of Grandmenil, thus denying the enemy

his main northern supply route. This attack was a very great achievement on the part of VII United States Corps, for it was carried out in appalling weather against extremely bitter opposition. XVIII United States Airborne Corps supported the VII Corps attack on its left flank, and by 7 January 82 United States Airborne Division had reached the outskirts of Vielsalm and Salmchateau. Meanwhile on the right of First Army, 30 British Corps attacked on 4 January on a front of two divisions. In the south 6 Airborne Division, which had been hurriedly brought over from the United Kingdom, had some fierce fighting in and around Bure, but secured the area on 5 January, and on the left 53 Division moved forward in touch with VII American Corps and secured Grimbiermont and the high ground to the east on 7 January.

Following the failure of his repeated attacks launched from the northern side of the salient, the enemy tried to shift his main weight farther west and south-west. Essential to this redistribution, however, was the capture of Bastogne and its road net. The dogged and indeed aggressive defence of Bastogne by the Americans continued to attract enemy divisions away from the northern sector until, by 6 January, there were no less than ten divisions, including three SS, fighting round the place. His failure to capture Bastogne was the overdue signal to the enemy that the Ardennes offensive must be called off. Sound appreciation would have told him that if the Meuse were not reached quickly, it would not be reached at all; obstinacy, and no doubt political pressure, made him keep up the attack for three weeks and pledge the whole of his strategic reserve in the effort.

The thrust towards Houffalize continued. In order to maintain the impetus of 30 Corps attacks, 51 Division was brought in to take the lead from 53 Division in an advance towards Champlon-Laroche. 30 Corps advance was to be taken up to the line of the River Ourthe. Laroche was captured on 10 January and meanwhile patrols of 6 Airborne Division reached St. Hubert the following day, making contact with the left flank of Third United States Army. By 13 January, 51 Division was on the line of the Ourthe southwards from Laroche. East of the Ourthe XVIII United States Airborne Corps was attacking south-east from the Stavelot-Malmedy area towards St Vith, threatening the enemy communications at the base of his salient.

The enemy fought stubbornly and gave ground very slowly, but on 16 January First and Third United States Armies joined hands in the Houffalize and the hostile salient was reduced to a bulge. General Eisenhower now ordered First United States Army to revert to General Bradley's command, while Ninth United States Army remained under my operational control.

I undertook the withdrawal of all British troops from the Ardennes with the greatest possible speed, in order to regroup for the battle of the Rhineland. Now was the opportunity to proceed with the utmost despatch to carry out our plans, in order to take full advantage of the enemy's failure.

REFLECTIONS ON THE BATTLE OF THE ARDENNES

The enemy had been prevented from crossing the Meuse in the nick of time.

The German counter stroke had been mounted with skill, and the attempt to drive a wedge between the British and American forces and to strike at our main supply bases of Liege, Brussels and Antwerp had been a bold though desperate bid to upset the progress of our strategy and to turn the situation on the western front to the enemy's advantage. The ability of the Germans to continue the war depended on avoiding concurrent major offensives on both the eastern and western fronts. Their stringent resources demanded a policy of alternation, whereby one front was stabilized while they concentrated against the other.

By the Ardennes offensive the enemy had hoped to hit the Western Allies so hard that our plans would have been seriously retarded, and the German striking force could have been switched to the sore-pressed eastern front.

There was another reason for playing for time. Time was necessary for the development of production in the dispersed industries remaining in operation, and in the underground factories which were being speedily constructed. New weapons were on the way: jet-propelled aircraft and faster submarines. Efforts had also to be made to make good the losses suffered in the winter battles of attrition and to raise the standard of the depleted German infantry.

There may also have been political considerations prompting the Ardennes offensive; Hitler may well have hoped to secure some success to brighten the Christmas of the depressed German nation.

The enemy plan was the result of Hitler's personal intervention, and was the second occasion on our front in which he forced on his generals an undertaking which was beyond the capability of the resources they controlled. While a spoiling attack to delay our spring offensive was clearly a justifiable military proposition, the launching of a counter offensive was not. The enemy could not afford to risk his striking force in such a hazardous operation, because he had failed to win the air battle first (an essential preliminary to major offensive operations under modern conditions) and because he had not the resources in fuel to

implement a plan of this scope. As he reached the limit of his penetration, the enemy was forced to abandon much equipment through lack of petrol and lubricants. Although he achieved some signal success in the initial stages, the enterprise was doomed to failure.

The battle of the Ardennes was won primarily by the staunch fighting qualities of the American soldier; the enemy's subsequent confusion was completed by the intense air action which became possible as weather conditions improved. Sixth SS Panzer Army broke itself against the northern shoulder of the salient while Fifth Panzer Army wasted its time, first by waiting for the Sixth SS Army, and secondly by having to fight for road space. Regrouping of First and Ninth United States Armies, assisted by British formations, made possible the formation of a reserve American corps. While the might of our Air Forces came into play against the enemy, the action of the reserve corps, co-ordinated with the drive from the south of General Patton's troops, forced the enemy from the salient; Hitler's projected counter offensive ended in a tactical defeat, and the German Army in the west suffered a tremendous battering.

After his defeat in Normandy, the enemy had made a remarkable recovery. He had succeeded in forming and equipping new divisions, and had not only organized a coherent front on the rivers and canals of the Low Countries, and along the Siegfried Line, but had also built up a strong mobile striking force. By December this force was ready for action.

Clearly the employment of this striking force was a matter of vital importance to the enemy. With such tremendous issues at stake, Hitler should never have gambled it in a desperate venture, in which he had not the resources to ensure the prerequisite conditions for victory, and in which failure would inevitably cause tremendous losses which he could never again replace.

The launching of a counter offensive in the Ardennes was the second major German mistake in the campaign. It is estimated that the enemy lost some 120,000 men in the battle, together with 600 tanks and assault guns. The disruption of his communications by the Allied Air Forces resulted in tremendous damage to locomotives and rolling stock, and also caused very grave losses to the depleted German Air Force which tried to intercept our attacks.

The enemy had succeeded in wresting the initiative from us, and in forcing us to postpone our own offensive intentions. The Allies had been caught off balance by the enemy, and had suffered a tactical reverse. Had the quality of the German formations been of the same high standard as in the early war years, with junior leaders of great dash and initiative, the temporary effects

of the counter stroke might well have been more grave; the enemy failed to exploit his success in the first vital days, and the fighting showed he was no match for the splendidly steady American troops.

The battle displayed many fine examples of Allied solidarity and team work. In particular, the passage of 30 British Corps across to the south flank of First United States Army, and its subsequent deployment east of the Meuse, was an operation of tremendous complications achieved without serious difficulty.

CHAPTER SIXTEEN

The Battle of the Rhineland

ALLIED PLANS AFTER THE BATTLE OF THE ARDENNES

FOLLOWING the reduction of the enemy salient the American armies continued the bitter struggle to push the enemy back from the Siegfried Line defences, taking the fullest advantage of the enemy withdrawal and the heavy defeat which he had suffered.

Meanwhile the new Allied plan of campaign emerged. It was essential to strike quickly in order to exploit the enemy's reverse in the Ardennes, and my proposal to the Supreme Commander was that we should now revert to our plans for clearing up the area between the Rhine and the Meuse from Dusseldorf to Nijmegen and establish a bridgehead north of the Ruhr. This plan was accepted and it was agreed that Ninth United States Army should undertake the southern offensive from the Julich-Linnich area, and would be made up to twelve divisions. The Ninth Army was to be under my operational command for the battle.

This operation had been in my mind for many months, and I felt well pleased that at last we were in a position to begin what I believed to be the final phase of the campaign. Once the northern Rhineland was in Allied hands we could force our way across the Rhine and commence the isolation of the Ruhr. We should also gain the starting position necessary for mobile operations in the plains of northern Germany.

The provision of the required degree of strength for Ninth United States Army was destined to take time. So long as Twelfth Army Group offensive through the stump of the German salient continued to yield good dividends, American regrouping for the Rhineland battle was not feasible. Moreover First United States Army had to gain the Roer dams before Ninth Army could thrust across the River Roer, since control of the flood waters would have made it possible for the enemy vitally to impede our operations. At the same time, farther to the south, Sixth United States Army Group was being forced to react to German thrusts in the Colmar sector; the enemy had opened attacks on 31 December and had gained some local successes. The enemy was also active in the sector north of the Saar, and it was necessary to ensure the stability of the front in this area.

On 12 January the great Russian winter offensive began and this had obvious repercussions on the enemy; it seemed most

probable that the priority of resources operating in favour of the western front would be switched to the east; it was important for us to take advantage of this fact.

In 21 Army Group, as soon as British formations could be released from the Ardennes, I pushed ahead with the plans for launching the thrust from the Nijmegen bridgehead. The operation was called 'Veritable'.

I issued orders for Veritable on 21 January, giving a target date of 8 February, and at the same time suggested to the Supreme Commander that the complementary offensive by Ninth United States Army, called operation 'Grenade', should start as soon as possible after the British thrust.

The object of the battle of the Rhineland was to destroy all enemy forces between the Rhine and the Meuse from the Nijmegen bridgehead as far south as the general line Julich-Dusseldorf, and subsequently to line up along the west bank of the Rhine with the Ninth United States Army from Dusseldorf to exclusive Mors, Second Army from Mors to inclusive Rees and Canadian Army from exclusive Rees to Nijmegen. After a most detailed study of the problem, the most suitable localities at which to make crossings of the Rhine itself had been found to be Rheinberg, Xanten and Rees.

In outline, the task of First Canadian Army was to launch the attack south-eastwards from Nijmegen to the general line Geldern-Xanten. As the advance proceeded a firm flank would be established on the Rhine and plans made for bridging the river at Emmerich. During the battle, Canadian Army would remain responsible for the security of the Nijmegen bridgehead and of our northern flank along the Maas.

Second Army was to hold a firm front on the Meuse facing east and to assist the Canadian operations by every means possible. At this stage of planning I envisaged Second Army crossing the Meuse to secure Venlo as part of the Veritable plan, though later this was cancelled because it proved unnecessary.

The task of Ninth United States Army was to launch its offensive across the River Roer from the Julich-Linnich sector, towards the Rhine between Dusseldorf and Mors. In the initial stages it had been agreed by the Supreme Commander that First United States Army would protect the right flank of the operation up to the River Erft, which would subsequently form the Ninth Army flank. The target date for Grenade could not be fixed at this time, for reasons I have already indicated, but I ordered that preparations were to be made for the attack to take place as soon as possible after 8 February.

The whole of the offensive strength of 21 Army Group was to be employed in Veritable, and I intended that 12 Corps of Second

Army would provide fresh divisions for First Canadian Army as the momentum of operations demanded.

At the time of issuing these orders I gave the armies a forecast of their subsequent roles. Second Army was to start planning for forcing the Rhine at Rheinberg, Xanten and Rees; the Rheinberg crossing, it was assumed, would become an American responsibility. First Canadian Army would eventually require to establish road and rail communications across the Neder Rijn at Arnhem, so that the capture of Arnhem and the bridging commitments there would be a likely future task for the Army.

THE CLEARANCE OF THE ROERMOND TRIANGLE

15-28 January

Before commencing the battle of the Rhineland there still remained a small commitment in the Roermond triangle. It will be remembered that operations had been planned in December for clearing the enemy from the Heinsberg area. Bad weather had led to the postponement of these operations by 30 Corps, and subsequently the Ardennes counter offensive had prevented Ninth United States Army from carrying them out. As the Allies turned to the offensive in the Ardennes salient I decided to tackle this task with Second Army troops as soon as circumstances permitted, and on 10 January instructed Second Army to commence clearing the enemy salient on 15 January.

The enemy was holding an area bounded by the Rivers Roer, Wurm and Meuse. There was one important water obstacle in front of our forward positions, the Saeffeler Beek, and farther west numerous minor streams which were likely to cause bridging problems. South-west of the River Roer the enemy had constructed three main lines of defence, and the town of Heinsberg itself was provided with very strong defences of the usual type. The enemy disposed two divisions on the front, but appeared to have no tactical reserves.

On 15 January 12 Corps commenced preliminary operations on the left flank in order to prepare approaches to the village of Susteren, and on the following day 7 Armoured Division began the main attack on the western flank. On 18 January an assault was launched in the centre sector in order to link up with armoured columns which were swinging in a left hook to get behind the enemy. The operations proved largely a matter for infantry, as the going was so bad that tanks and special armour could give little effective support. On 20 January the high ground in the centre of the area at Bocket was secured and our troops closed in on the town of Heinsberg, which in spite of counter attacks was

captured on 24 January. On the right flank, operations started on 20 January in conjunction with the left hand division of Ninth Army. In this area the enemy resistance was less spirited and the opposition was quickly cleaned up.

By 26 January 12 Corps had completed its task. The operation had in fact been a large scale methodical mopping-up operation carried out under the most difficult conditions. As a result the enemy suffered considerable losses, and apart from a small bridgehead south-west of Roermond, had now been pushed east of the Roer. The area was handed over to Ninth United States Army.

PLANNING THE BATTLE OF THE RHINELAND

Very considerable study had been made for launching the northern thrust of the battle of the Rhineland, and indeed First Canadian Army was able to consider the problem and complete its plans while the Ardennes battle was being fought. The necessary maintenance resources were prepared and the improvement of communications necessary for major operations had proceeded with vigour. It is interesting to note that the tonnage off-loaded at Canadian Army roadheads during February reached the high figure of 343,800 tons, of which 223,000 tons represented the build-up of stores for the offensive. 446 special freight trains moved the stores forward, in some cases to railheads within three miles of the front line.

Once therefore our formations could be concentrated, it was possible to undertake the operation without undue delays.

The uncertain factor remained the date of readiness of Ninth United States Army. While General Simpson and his staff were able to plan their part of the battle, it remained to be seen by what date the Army could be made up to its required strength for the operation: in view of the other commitments of Twelfth United States Army Group.

The weather remained an anxiety. The thaw was beginning and, apart from the floods, was playing havoc with our communications.

The concentration of 21 Army Group formations into First Canadian Army was a complicated process. 30 Corps had to be disengaged from the Ardennes and moved to the north, while other formations were fighting with 12 Corps in the Heinsberg salient until 26 January. The troops had to move into the Nijmegen bridgehead through the bottleneck of the bridges at Grave and Mook, and had to form up prior to the assault in an extremely limited area.

Elaborate arrangements were necessary in assembling the forces in order to mislead the enemy about our intentions, and steps were taken to give the impression that forthcoming operations

were being mounted farther to the west directed on Utrecht. Comprehensive camouflage schemes were devised to hide concentration of troops, artillery, and ammunition in the Nijmegen area and provision had to be made which would satisfy either normal ground conditions or snow.

South-east of Nijmegen the main features of the battle area were the Reichswald Forest, the flood plains of the River Meuse, the Niers and the Rhine, and the undulating and wooded country which lay between them. Owing to the excessive rainfall in December there was considerable flooding along the Rhine, particularly in the area of Emmerich, and the Maas floods extended to about a thousand yards on either side of the river. During January there was a drop in the water levels, but although the rivers receded to their normal channels the ground remained very saturated. A considerable amount of data had been collected regarding the effect on our communications both of artificial flooding and severe frosts; it was clear that the Rhine could be artificially flooded by breaching the winter dykes, and we had to be prepared as far as possible to deal with such eventualities.

The enemy defences in the Canadian sector were organized in three main zones. West of the Reichswald Forest there was a belt of defences about two thousand yards deep, covered by an extensive anti-tank ditch and numerous field works in and around the villages. About three kilometres east of this forward position was the northern end of the Siegfried Line; some of its works had been constructed a number of years previously and were no longer evident on our air photographs, but a good deal of digging had been done in the recent months. The main belt of the line ran from the Nijmegen-Cleve road roughly south over the high ground in the Reichswald to the heavily defended town of Goch, whence it continued south to Geldern and thence along a slight lip which overlooked the valley of the Maas as far as Roermond. The northern portion of the belt was organized in great depth with a succession of trench systems stepped back to the high ground about Materborn. A further development in the last two months had been the construction of a further line east of the Reichswald from Cleve to Goch, thus making the forest a self-contained centre of resistance. The third defensive system was known to us as the Hochwald 'lay-back'. This was about ten kilometres east of the Siegfried Line, and ran from the Rhine opposite Rees to Geldern and thence away to the south.

In front of Ninth United States Army the natural obstacles of the Roer valley had been improved by the construction of a network of defences and minefields. There were also continuous trench systems along the east bank of the Meuse, with additional defences in areas such as Venlo and Roermond.

The Reichswald sector itself was controlled by 84 German Infantry Division with various reinforcements, including three battalions of parachutists. It was estimated that the enemy had nine divisions holding his front between Duren and Nijmegen, and it appeared that there might be three Panzer type and two parachute divisions available as a mobile reserve to deal with an Allied offensive in the north. Behind the enemy forward troops the two main routes were the road from Cleve to Xanten, and the railway from Cleve through Goch to Xanten; both depended on the bridges over the Rhine at Wesel, the nearest alternative being Homburg some fifteen miles to the south. There were no bridges over the Rhine between Wesel and Nijmegen, but we had observed a number of ferries along this stretch of the river which were kept under close attention by our Air Forces.

CANADIAN ARMY PLAN

First Canadian Army planned to launch the attack on a one corps front employing 30 Corps; as soon as a break-in had been achieved, and the front widened to permit the opening of additional maintenance routes, 2 Canadian Corps was to take over the left sector and the operations would be continued on a two corps front.

The formations available to 30 Corps comprised six infantry divisions, one armoured division, three armoured brigades, eleven regiments of specialized armour, five Groups Royal Artillery, and two anti-aircraft artillery brigades. The main features of the break-in operation were to be the development of a tremendous weight of artillery from well over a thousand guns, together with a comprehensive interdiction programme by the Allied Air Forces.

It is interesting to note that the strength of First Canadian Army was just under half a million men at the opening of the operation.

The initial assault was timed for 1030 hours on 8 February on a frontage of four infantry divisions, 51, 53 and 15 Divisions and 2 Canadian Division from right to left. In addition, 3 Canadian Division was to attack on the extreme northern flank later in the day, at a time when it would be possible to switch additional artillery support to the sector. The task of breaking through the Siegfried defences near Kranenburg, and of opening the road to the high ground near Cleve, fell to 15 Division; it was then planned to pass 43 Division through to the Materborn area, whence it would swing round the east side of the Reichswald to capture the key centre of Goch in conjunction with 51 Division, which was to assault the town from the west. Immediately in rear of 43 Division Guards Armoured Division was to pass through the Materborn feature, turn south and seize the high ground north of Sonsbeck.

Preparations were to be made to send a strong mobile column to seize the bridge at Wesel.

Extensive preliminary air operations were undertaken against railways bridges and ferries serving the battle area and, during the night preceding the assault, Bomber Command delivered heavy raids on Cleve and Goch and on the main communication centres and billeting areas in the enemy rear.

THE BATTLE OF THE RHINELAND: FIRST PHASE

At 0500 hours 8 February the artillery programme opened on the enemy defences and continued until 1000 hours, when the barrage proper started. In addition to this programme each division organized 'pepper pot' groups, which comprised the machine gun battalion and available divisional reserves of light anti-aircraft and anti-tank artillery, in order to saturate with fire the enemy defences on the immediate front and flanks of each divisional attack.

The infantry went forward at 1030 hours. The effects of our bombardment were very considerable, and in particular the counter battery measures largely neutralized the enemy artillery. Opposition to our advances was stiffest in the right sector against 51 Division, whose task was the capture of the high ground at the south-west corner of the Reichswald Forest. Here it appeared that the enemy had been recently reinforced as a result of pre-arranged reliefs. In the centre 53 Division secured the high ground on the north-west corner of the Forest and took some two hundred prisoners. Many mines were encountered and it was soon evident that the state of the ground was going to constitute a great problem to our future operations; the Churchill gun-tanks and bridge layers managed to keep up with the infantry, but flame throwers and flails got bogged down soon after crossing the start line. 15 Division was also hampered by extensive minefields and saturated ground, but by 1700 hours the village of Kranenburg had been taken and leading troops were approaching Frasselt. To the left rear of 15 Division, 2 Canadian Division secured Wyler by the early evening after some stiff fighting. At 1800 hours 3 Canadian Division in buffaloes attacked across the floods north of the Nijmegen-Kranenburg road and were quickly in Zyfflich and Zandpol.

By midnight all formations had achieved the objectives set for the day. Over eleven hundred prisoners had been taken and our own casualties had not been severe. The bulk of the German 84 Division had been severely mauled, but air reconnaissance indicated that there was a general northward movement of enemy troops across the line of the road Geldern-Wesel.

Our main difficulties had been due to the extensive minefields and above all to the bad state of the ground; it was reported that the flood level in the area north of the Nijmegen-Cleve road had risen eighteen inches between 1300 hours and nightfall; the whole area was sodden, and in spite of the special provisions made for the creation of new tracks and the improvement of those existing, it was clear that we should continue to have grave difficulties in the maintenance of our communications.

During the night, operations continued assisted by 'movement light' and the leading divisions pressed forward to their further objectives. 43 Division, now concentrated in Nijmegen, was at one hour's notice to move from midday 9 February and Guards Armoured Division, concentrated near Tilburg, was also at one hour's notice to come forward.

Operations on 9 February went well against moderate opposition except on the extreme right, where 51 Division continued to meet stiff resistance. In the Reichswald Forest 53 Division cleared the Stuppelburg feature and the high ground south-west of Materborn, but ground conditions deteriorated so rapidly that the divisional axis completely gave way and had to be closed for repairs; meanwhile traffic for 53 Division had to use the 15 Division axis.

Starting at 0400 hours, 15 Division pierced the Nutterden defences of the Siegfried Line and by evening its leading troops were on the high ground at Materborn and patrols were in touch with strong enemy elements in the outskirts of Cleve. During the day, 43 Division was brought forward and reached Nutterden by midnight. North of the main road, 3 Canadian Division continued its water-borne operations in the floods, moving from one island village to another and capturing about six hundred prisoners. In some places amphibious patrols reached the banks of the Rhine.

Traffic conditions continued to deteriorate. It was apparent that the main Nijmegen-Kranenburg road would soon be completely under water, and, indeed, eighteen inches were reported on certain stretches at midday 9 February.

Away to the south, First United States Army was now threatening directly the Roer dams, as a result of which the Germans destroyed portions of the discharge valves of the Schwammanuel Dam. A volume of water was released which caused the River Roer to overflow its banks along the entire front of Ninth United States Army. It will be seen that I had intended to launch this Army on 10 February, but in view of these circumstances had to postpone the operation.

During the night 9/10 February there was fierce fighting in and round Cleve, where 43 Division was endeavouring to pass across the high ground and turn the north-east corner of the Reichswald. There was a number of German paratroop detach-

ments in this area, and the delays imposed by our traffic difficulties had evidently given the enemy time to scrape together a number of units to oppose us. In the centre of the Reichswald the advance continued steadily, but to the south the enemy was still fighting desperately in the network of defences covering the road centres of Hekkens and Gennep. On 10 February the main Nijmegen-Cleve road was under more than two feet of water for a length of five miles; north of the road all operations had to be conducted in amphibious vehicles; south of the road the approaches to the Reichswald and the tracks which ran through it had been severely churned by the traffic. South of the Reichswald there was a good road from Gennep to Goch, but here the enemy was quick to realize the importance of this sector and hung on in a series of well sited positions.

Meanwhile the Germans were quickly reinforcing the battle area; on 9 February a unit of 7 Parachute Division was identified, and, on the following day, units from two other reserve divisions, including 6 Parachute Division, had yielded prisoners. On 12 February the enemy committed 15 Panzer Grenadier Division and 116 Panzer Division.

In spite of the stiffening enemy resistance and the appalling difficulties of the ground, progress continued. Following a successful night assault across the flooded River Niers, 51 Division captured the village of Gennep; this was an important gain, as we intended to bridge the Meuse at this point in order to relieve the Grave bottleneck. Subsequently 51 Division reached the road centre of Hekkens where it joined elements of 53 Division. By 13 February 53 Division had cleared the entire area of the Reichswald after driving off, with heavy losses to both sides, a series of sharp counter attacks in the south-east corner of the Forest. Along the eastern face of the Reichswald, 43 Division, in its operations to roll up the German positions in the sector from north to south, secured Bedburg. The division was counter attacked a number of times by infantry supported by tanks. 15 Division mopped up Cleve and handed it over to 3 Canadian Division.

By 13 February the first phase of the operation had been completed. On the right we were well on our way to the key defences of Goch; the Reichswald Forest was completely in our hands; to the east we were converging on the Goch-Udem line; and meanwhile in the north a battalion of Canadians was on the west bank of the Rhine opposite Emmerich. Our main problem remained communications. The road from Beek to Kranenburg, a distance of five miles, was now under some four feet of water, and the supply and maintenance of all troops in the Cleve area had to be carried out by Dukws from a starting point near Beek.

The floods in the River Roer valley still made it impossible

to launch the American assault from the south. Ninth United States Army was all 'teed-up' to launch Operation 'Grenade', and it was an extreme disappointment for us all that it should be forced to remain inactive until flood conditions improved. Meanwhile 'Veritable' had to continue alone, and against it the enemy was able to concentrate all his available reserves; it was therefore inevitable that progress was slower than had been hoped.

In order to maintain the maximum impetus, I ordered 11 Armoured and 52 Divisions to be transferred to Canadian Army from Second Army forthwith. An American reserve division relieved 52 Division on the Meuse front near Venlo. The difficulty was to deploy additional strength through the Reichswald Forest in view of the communications, but I wanted to make certain that General Crerar had at his disposal all the resources he could use for the battle. Although it had been planned to launch 'Veritable' and 'Grenade' almost concurrently, it was now to be hoped that the concentration of enemy reserves against Canadian Army would in fact greatly facilitate the progress of Ninth American Army when at length it could be launched.

THE BATTLE OF THE RHINELAND: SECOND PHASE

Our troops continued their relentless pressure against the steadily increasing opposition; on 14 February we were faced by one Panzer, one Panzer Grenadier, four parachute and three infantry divisions; in particular the German parachute troops fought with fanatical obstinacy and ferocity and, however untenable their situation, hung on to the last man.

2 Canadian Corps took over the left sector of the front on 15 February and, the following day, 52 Division came into the line on the extreme right of 30 Corps. 30 Corps operations were directed on the two axes Gennep-Venlo and Goch-Geldern, while 2 Canadian Corps made for Udem and Calcar. 52 Division moved south from Gennep and took Afferden, but further progress became almost impossible owing to the floods. 51 Division closed in on the western approaches to Goch, and to the north and north-east 43 and 53 Divisions fought their way to the escarpment overlooking the town. 43 Division had withstood repeated counter attacks along the eastern face of the Reichswald, but had steadily rolled up the enemy's positions from the flank and had taken 2,300 prisoners in the process.

On 18 February, 15 Division began to pass through from the north, in order to lead the assault on Goch; the following day the German commander of the town surrendered, but it took nearly forty-eight hours before 15 and 51 Divisions had cleared

Goch. On the left 2 Canadian Corps fought hard to secure the Udem-Calcar spur. An advance across the Goch-Calcar road towards Bocholt enabled us to outflank and capture Moyland, but efforts to turn the enemy out of Calcar were unavailing; he counter attacked strongly with the newly arrived Panzer Lehr Division and, indeed, gained some temporary success before being driven off. Another German infantry division (190) also joined the battle, bringing the total formations against us to eleven.

Meanwhile bridging operations had been undertaken at Gennep across the Meuse; by 15 February the bridge was nearly completed, but the approaches were two feet under water, and owing to the speed and height of the river the bridge was not finally opened to traffic until 20 February; it is interesting to note that this Bailey bridge was over 4000 feet in length and was thus the longest we had so far constructed in this campaign.

With the capture of Goch and the progress we had made on the flanks, we were now through two of the three main defensive belts which the Germans had organized between the two rivers. In the north it remained to break through the last defensive system, the Hochwald 'lay-back', running along the high ground from opposite Rees to Geldern. 30 Corps was directed from the Goch area through Weeze and Kevelaar to Geldern, while 2 Canadian Corps was to deliver the main operation in the general area between Udem and Calcar through the Hochwald Forest to Xanten. 4 Canadian Armoured, 11 Armoured and 3 Divisions were being brought into the battle, and regrouping took place in order to increase the strength available to 2 Canadian Corps for its new task.

THE BATTLE OF THE RHINELAND: COMMENCEMENT OF THE SOUTHERN ATTACK

It has already been seen that the original plan was to launch the two converging thrusts for the battle of the Rhineland approximately simultaneously, but that it had not originally been possible to predict how quickly Ninth United States Army could be made up to the strength required for its task owing to other preoccupations in Twelfth United States Army Group.

In the last days of January, however, the Supreme Commander ordered the provision of additional formations to Ninth United States Army in order to complete it to the revised total of ten divisions. Since at this time we were planning to launch 'Grenade' on about 10 February, the American concentration in the north had to be completed with very great speed. It was in fact achieved remarkably quickly. Some of the United States divisions had to move over very long distances using appalling roads and tracks

in the worst possible weather, but they got into position on time and gave an excellent example of the truly extraordinary mobility of American units when regrouping.

I have also mentioned how the plans for launching the Ninth Army thrust were delayed by the release of the Roer flood waters by the retreating Germans. Ninth Army stood ready, but suffered a period of great frustration awaiting the subsidence of the water.

On 17 February it was decided that the American attack would be able to start on 23 February providing we had no more heavy rain, and in fact at 0330 hours on that day General Simpson's troops assaulted across the River Roer with XIX Corps on the right and XIII Corps on the left.

Twelve hours after the crossing, sixteen battalions were on the east bank, Julich was clear of the enemy, and the lateral road to the north for some eight miles was in our hands. In spite of the great difficulty caused by floods and heavy shelling of the sites, seven heavy bridges and a number of light infantry assault bridges were thrown across the river within twenty-four hours. The casualties to American troops were light and 700 prisoners were taken on the first day.

Meanwhile on the right flank of Ninth Army, First American Army assaulted astride Duren.

The American formations advanced in fine style. The weather was fine and the ground was drying; on 24 February four divisions were across the river and were soon followed by armoured divisions; by 26 February the bridgehead was some twenty miles wide and ten miles deep, the town of Erkelenz had been captured and some 6000 prisoners taken. Operations were developed on two main thrust lines. XIX Corps was directed on Neuss, Krefeld and Kempen, while XIII Corps was to pass west of Munchen Gladbach towards Viersen and Dulken.

THE BATTLE OF THE RHINELAND: THE LINK-UP BETWEEN FIRST CANADIAN AND NINTH AMERICAN ARMIES

On 26 February 2 Canadian Corps started its attack, directed ultimately on Xanten. Most of the enemy parachute troops were fighting in the sector and a desperate struggle took place on the Udem-Calcar ridge. Ground conditions were bad and much of the armour was bogged down, but our advance was pressed by day and by night; the enemy defences south of Calcar were finally breached and armoured troops drove on slowly to force a wedge between the Balberger and Hochwald Forests. By 3 March the greater part of these forests had been cleared and the armour was on the high ground to the south, round Sonsbeck.

As 2 Canadian Corps got under way the opposition farther south began to loosen and 30 Corps started swinging south-east. In the centre of this corps front, 53 Division captured Weeze and pushed on down the road through Kevelaar towards Geldern. On the east bank of the Meuse, 52 Division, with a Commando brigade under command, reached Well, which was one of the sites selected for bridging operations over the river.

Meanwhile by 27 February, Ninth American Army had broken through the main enemy defences and the advance gathered further momentum. On 1 March XIX Corps secured Munchen Gladbach, while on the right progress was rapid along the left bank of the River Erft towards Neuss. On the left flank, XVI Corps, which had now joined the operation, thrust north-west and entered Roermond and Venlo. Neuss was cleared on 2 March and the Rhine was reached in two places; at the same time XIII Corps, in the centre of the attack, captured Krefeld. Early on 3 March, the Americans were in Geldern, and 35 Division of XVI Corps made contact with 53 Division in the northern outskirts of the town.

FINAL STAGES OF THE BATTLE OF THE RHINELAND

By 5 March the right and centre corps of Ninth Army had completed their tasks and were in possession of the left bank of the Rhine from Neuss inclusive as far north as Orsoy. XVI Corps was swinging south of the Venlo-Wesel road towards the Rhine at Rheinberg, in conjunction with 30 Corps which was turning east towards Wesel. By this time the enemy was concerned solely with holding us off from his shrinking bridgehead covering the crossings at Wesel; the key of his perimeter was the hinge about Xantern, where enemy parachute troops were fighting fanatically to hold back 2 Canadian Corps. On 8 March the Canadians launched a strong attack from the north-west against Xanten and secured most of the town despite the resistance. Two days later the enemy rearguards had retired across the river and blown the last remaining bridge at Wesel. Unfortunately the final days of the operation were very unfavourable for flying and hindered the Air Forces in their attempts to deal with the targets presented at the Wesel bottleneck.

REFLECTIONS ON THE BATTLE OF THE RHINELAND

21 Army Group, with Ninth American Army, was now lined up along the west bank of the Rhine from Neuss to Nijmegen.

Although it had not been intended, the delay in mounting the southern attack of the battle had not in the end been to our disadvantage. When it could start the rapidity and violence of the

Ninth Army thrust caught the enemy off balance; it relieved the pressure on the Canadian front, and by 1 March the enemy was threatened with encirclement and had no choice but to get as much as possible of his personnel and material back across the Rhine. The main features of the operation were the appalling weather conditions in the early stages, and the intense opposition of the enemy.

The operations along the Rhine plain north of the Reichswald were mainly conducted in various types of amphibious vehicles, without which equipment this flank could not have been cleared. In the central and southern sectors the mud and slush were indescribable; the heavily wooded areas were lacking in roads and tracks and the low lying meadows were either flooded or saturated.

The enemy parachute troops fought with a fanaticism unexcelled at any time in the war, and it is interesting to note that the Germans had available against Canadian Army some 700 mortars and over 1000 guns of all types; the volume of fire from enemy weapons was the heaviest which had been met so far by British troops in the campaign.

We had employed the full concentration of our offensive resources for the task and had overwhelmed the resistance. The enemy had suffered yet another great defeat; Ninth Army took some 30,000 prisoners while, on the northern sector, 23,000 prisoners were counted. It was estimated that in killed and wounded the enemy lost nearly 40,000 men; eighteen German divisions and a large number of hastily formed battle groups had been severely mauled.

The Germans had committed the third major blunder of the campaign. Following the failure in the Ardennes, the only sound course open to the enemy was to stage a withdrawal back across the Rhine. His remaining resources might well have succeed in causing us considerable delay on that barrier. But the tremendous importance of the Ruhr, battered as it was, and the impotence of his Air Force to act in its defence, led him to stand and fight west of the Rhine in the hope of masking that area.

After all that had gone before, the crippling losses sustained by the enemy in the Rhineland brought the end of the war to a matter of weeks. The Germans had not the manpower to raise new divisions, and in any case their industry could not have equipped fresh formations. Their remaining oil refineries and storage plants were being subjected to increasingly heavy air attacks, and their communications were rapidly being reduced to a state of chaos. Once we were across the Rhine the Wehrmacht would no longer have the tanks, transport or fuel necessary to compete with the Allied forces in battle.

CHAPTER SEVENTEEN

The Battle of the Rhine

THE AMERICAN ARMIES CLOSE TO THE RHINE

WHILE the battle of the Rhineland was progressing in the north the American armies in the south were lining up on the Rhine.

On 7 March, following a swift break through, First United States Army secured intact the railway bridge at Remagen and immediately began forming a bridgehead on the east bank. The importance of this bridgehead to our subsequent operations cannot be over-estimated, as the enemy reaction to it was immediate and a considerable number of surviving enemy formations soon became committed in the sector.

Meanwhile, Third United States Army thrust to the Rhine at Coblenz and subsequently established a bridgehead south-west of the city over the River Moselle. On 15 March American troops thrust southwards from this bridgehead and eastwards from Trier while Seventh United States Army attacked northwards between the Rhine and Saarbrücken. While Seventh Army fought steadily through the Siegfried defences and pinned down the German troops, armoured columns of Third Army drove into the rear of the enemy positions. Resistance east of the Moselle crumbled, the Saar was enveloped, and the Rhine cities of Mainz and Worms were captured. By the third week in March the Allied Armies had closed to the Rhine throughout its length.

TRANSFER OF TROOPS FROM ITALY

In order to increase the weight of the Imperial forces on the Western Front, a decision was made to transfer additional troops from Italy to 21 Army Group. The despatch was arranged of Headquarters 1 Canadian Corps and Corps troops, with 1 Canadian, 5 Canadian Armoured, 1, 5 and 46 Divisions; 1 and 46 Divisions were not to be made available immediately, but the other formations were due to arrive in Belgium by April. The whole operation involved the transfer of a force the same size as the original assault forces for Overlord, and there was an extremely short time available for planning. Administrative and Movement staffs were despatched to Marseilles, through which port the force was to arrive, and a chain of transit camps was established across France. The movement started on 18 February and was completed in the second week of

April. On 15 March Headquarters 1 Canadian Corps took over a sector on the River Maas, on our northern flank, with 49 Division under command, pending the arrival of its own formations.

ORDERS AND PREPARATIONS FOR THE BATTLE OF THE RHINE

On 9 March I issued orders for crossing the Rhine north of the Ruhr. My intention was to secure a bridgehead prior to developing operations to isolate the Ruhr and to thrust into the northern plains of Germany.

Outline Plan

In outline, my plan was to cross the Rhine on a front of two armies between Rheinberg and Rees, using Ninth American Army on the right and Second Army on the left. The principal initial object was the important communications centre of Wesel. I intended that the bridgehead should extend to the south sufficiently far to cover Wesel from enemy ground action, and to the north to include bridge sites at Emmerich; the depth of the bridgehead was to be made sufficient to provide room to form up major forces for the drive to the east and north-east. I gave 24 March as target date for the operation. It will be recalled that the battle of the Rhineland was not completed until 10 March, so that the time available for preparing to assault across the greatest water obstacle in western Europe was extremely short. The all important factor was to follow up the enemy as quickly as possible, and we were able to achieve this speed of action mainly because of the foresight and preliminary planning that had been devoted to this battle for some months.

Some Planning Details

The problem of forcing the Rhine had been studied throughout the winter months; a great deal of research was undertaken by the engineers to assess the likelihood and effects of flooding during our crossing operations. Early provision was made for reducing such risks by planning the construction of booms upstream from the crossing sites, for the replacement of certain floating bridges by pile bridges as soon as possible, and for making the bridges and their approaches flood-proof. I have mentioned that it had been concluded that suitable crossing places existed in the area of Rheinderg, Xanten and Rees. An assault across the river near Emmerich was not considered feasible; not only was there a number of minor waterways on the west bank of the river barring the

approaches to bridge launching sites, but the high ground at Hoch Elten directly overlooked the whole area.

While the battle of the Rhineland was being fought, Second Army was directing the development of east-west communications, and as the progress of operations permitted, bridges over the Meuse were opened at Gennep, Well, Lottum and Venlo.

Plans were made weeks ahead for the assembly of the tremendous tonnage of administrative stores and requirements for the battle, and in particular of the immense quantity of bridging material of all kinds; a special engineer staff was set up to tackle the bridging of the Rhine.

The main maintenance build-up began when Second Army opened its roadhead between the Meuse and the Rhine about 8 March and continued at full intensity. A large proportion of the requirements had to be moved forward by road, and Second Army eventually disposed of a road lift of over 10,000 tons, exclusive of Corps transport and the bridging echelons. During the three weeks prior to the operation, 10,000 tons a day were delivered at railheads west of the Meuse.

By 23 March the roadhead had received 60,000 tons of ammunition and 30,000 tons of engineer stores alone. Other commodities accounted for some 28,000 tons, and were in addition to normal daily maintenance requirements. It was a fine achievement that these stocks were delivered into the restricted area concerned with such rapidity.

The movement problem was vast. In the week preceding the start of operations, operational moves in the Second Army area (as opposed to administrative movement) involved over 600 tanks, 4,000 tank transporters and 32,000 wheeled vehicles.

All available amphibious vehicles were collected, and in addition a flotilla of craft from the Royal Navy was transported by road across Belgium and southern Holland in order to take part in the battle.

It is important to notice the way in which planning for this battle was related to the grouping of forces in 21 Army Group. While the battle of the Rhineland was being fought by First Canadian Army, Second Army was holding a quiet sector of the line along the Meuse so that its Headquarters was free to concentrate on planning the Rhine crossing. General Dempsey was, indeed, charged not only with planning the Second Army operation, but also with assisting in any way possible the preliminary planning by Ninth American Army, which was engaged in the Rhineland battle. Towards the end of January, Headquarters 12 Corps was withdrawn into reserve in order to work out the highly complicated technique required for the actual assault crossing; considerable thought and study were given to this problem, and trials and

practices were carried out on an appropriate stretch of the Meuse in order to perfect the battle drill which was subsequently adopted by the British assaulting Corps.

The fortnight between the end of the battle of the Rhineland and the start of the battle of the Rhine was a period of intense activity. Rapid regrouping of formations was carried out; 30 Corps returned to Second Army on 8 March and the sector on the Rhine from Wesel to inclusive Emmerich was taken over by 8 Corps, which was to provide the covering troops behind which the assaulting formations were to form up. As D-day approached, Second Army extended its front farther to the west by taking under command 2 Canadian Corps; at the same time 12 and 30 Corps, which were to deliver the assault, gradually took up their positions and relieved 8 Corps. In the final line-up on the Rhine, Ninth American Army was disposed from Worringen, about twelve miles south of Dusseldorf, to the River Lippe just above Wesel; Second Army front extended from the Lippe to the Dutch frontier about eight miles west of Emmerich; from this area Canadian Army was responsible for our front to the North Sea.

Our final preparations were hidden by the creation of dense and continuous clouds of smoke along a front of some fifty miles; behind this screen the assaulting troops took station.

Topography

The width of the Rhine on our front was between four and five hundred yards, but at high water it was liable to increase to between seven and twelve hundred yards. The mean velocity of the current was about three and a half knots. The river bed itself was composed of sand and gravel and was expected to give a good bearing surface for amphibious tanks and trestles. The course of the river was controlled by a highly developed system of dykes; the main dyke was generally sixty feet wide at the base and some ten to sixteen feet high, and formed a formidable obstacle. Although our operations in February had been severely handicapped by flooding, the waters were subsiding rapidly and the ground was drying remarkably quickly.

The Enemy

Shortly before the battle, Kesselring became Commander-in-Chief West in place of von Rundstedt. The opposition facing us was largely provided from Army Group "H" under Blaskowitz. The sector from near Krefeld to just west of Emmerich was the responsibility of First Parachute Army, while farther west Twenty-Fifth Army was disposed across north-west Holland to the sea. In

the line between Cologne and Essen there were four infantry divisions along the river opposite Ninth American Army; between Essen and Emmerich there were four parachute divisions and three infantry divisions. In reserve, 47 Panzer Corps was in the area some fifteen miles north-east of Emmerich, with 116 Panzer and 15 Panzer Grenadier Divisions. It was estimated that local depots and training units could produce the equivalent of three weak divisions, and that the Volkssturm and other quasi-military organizations might find another thirty thousand men. Although Wesel and Rees had perimeter defences and an anti-tank ditch, the enemy defences in the main were only such as had been prepared in the short period since the end of the Rhineland battle. They had little depth and were mainly simple earthworks.

On the Ninth Army sector it was estimated that the enemy had deployed about fifty-five batteries, while some five hundred guns were believed available to oppose the British crossing. The enemy had deployed formidable anti-aircraft defences, as he had been able to call upon the extensive anti-aircraft layout of the Ruhr. It was appreciated that there were eighty heavy and two hundred and fifty light anti-aircraft guns in the Bocholt-Wesel-Emmerich triangle, and from their location it seemed clear that the enemy anticipated the use of airborne forces in our crossing operation.

The Allied Forces

Ninth United States Army comprised XIII, XVI and XIX Corps with a total of three armoured and nine infantry divisions. In addition to 8, 12 and 30 Corps, Second Army included for the initial stages of the operation 2 Canadian Corps and XVIII United States Airborne Corps; the latter comprised 6 British and 17 American Airborne Divisions. The total forces in Second Army were four armoured, two airborne and eight infantry divisions, five independent armoured brigades, one Commando brigade and one independent infantry brigade. 79 Armoured Division was in support of the operation with all its resources of specialized armour and amphibious devices.

A tremendous weight of day and night heavy bombers, medium bombers and Allied Tactical Air Forces was made available in support of the operation.

The Detailed Plan

The principle I laid down in planning the battle of the Rhine was that we should deliver our assault, and develop our subsequent operations, with the maximum weight and impetus at our disposal.

The battle was to be delivered with such drive and strength that it would completely overwhelm the enemy and so lead us quickly to final victory in the campaign.

The object of the first phase of the operation was to secure a bridgehead on the general line Duisburg-Bottrop-Dorsten-Aalten-Doetinchem-Pannerden. The River Lippe was the boundary between the assaulting armies.

Ninth Army was to assault across the river south of Wesel, its principal task being to secure the right flank of the operation. The main bridging centre for this army was to be in the Rheinberg area.

Second Army was to deliver its assault north of the River Lippe. Its tasks were to capture the communication centre of Wesel, so that Ninth American Army could bridge the river at that place, and to secure the initial bridgehead from exclusive Dorsten to Pannerden. The main bridging centres of Second Army were to be at Wesel, Xanten and Rees. Formations of 2 Canadian Corps were to be passed over the Rees bridges at the appropriate time and to be employed in expanding the bridgehead north-westwards towards Doetinchem and Hoch Elten and in securing Emmerich.

The bridging of the Rhine at Emmerich was made the responsibility of First Canadian Army, and when this task had been carried out, 2 Canadian Corps was to revert to command of that army. In addition to this commitment, First Canadian Army was also made responsible for ensuring the absolute security of the Nijmegen bridgehead and of our northern flank from Emmerich to the sea. It was essential to ensure that we should not become unbalanced by enemy action against the Canadian Army sector.

The second phase of the operation involved the expansion of the bridgehead to the general line Hamm-Munster-Rheine-Almelo-Deventer-Apeldoorn-Otterloo-Renkum. The right boundary of Ninth Army was to run from the Rhine north of Duisburg to Dorsten thence eastwards along the River Lippe to Hamm. Its left boundary included Wesel, Raesfeld, Coesfeld and Munster. Between Second Army and Canadian Army the boundary was Emmerich-Doetinchem-Ruurlo-Borculo-Borne, all inclusive to Canadian Army. Ninth Army was to hold its bridgehead south of the River Lippe securely and pass a reserve corps through the right flank of Second Army to secure the line Hamm-Munster, forming a right flank on the River Lippe as it moved eastwards; this reserve corps was to come into the lead when we reached the general line of the railway between Dorsten and Borken. Second Army would then hand over to Ninth Army the area south of and including the road Wesel-Brunen-Raesfeld-Heiden.

Second Army was to operate to secure a general line from

Munster exclusive to Rheine and Hengelo. When Canadian Army took over the Emmerich bridgehead, and with it command of 2 Canadian Corps, it was to operate to the north to attack the Ijssel defences from the rear and to capture Deventer and Zutphen. It was then to cross the Ijssel and capture Apeldoorn and the high ground between that place and Arnhem; Canadian Army was also to prepare to bridge the river at Arnhem and open up routes from Nijmegen northwards. A secure flank was to be formed facing west on some suitable line running north from the Neder Rijn about Renkum.

The tasks of XVIII United States Airborne Corps were to disrupt the hostile defences north of Wesel, to deepen the bridgehead, and to facilitate the crossing of the river by Second Army and its link-up with Ninth American Army. It was then to prepare for further offensive action to the east on orders from Second Army.

It was decided to drop the airborne troops east of the Rhine *after* the assault across the river had taken place. There were two main reasons for this decision: daylight was desirable for the employment of airborne troops and, secondly, it would be impossible to make full use of our artillery for the ground assault if airborne troops were dropped in the target area before we had crossed the river. In deciding the landing and dropping zones for the airborne forces, the principles employed were that they should drop within range of artillery sited on the west bank of the Rhine, in order to obtain immediately artillery support, and that the link-up with the ground troops should be effected on the first day of the operation.

For the airborne operation an elaborate counter-flak fire plan was built up. It was arranged that artillery would deal with enemy anti-aircraft guns within range, and that the Royal Air Force should undertake the neutralization of guns beyond this area which could engage the troop carriers and gliders. Very detailed arrangements were necessary for the control of artillery fire during the passage of the airborne fleets.

A great weight of artillery was disposed in support of the assault. XVI Corps, which was assaulting on the Ninth Army front, was supported by over six hundred field medium and heavy guns. Over thirteen hundred guns were available in support of 12 and 30 Corps.

There was a very great concentration of engineers for the operation; thirty-seven thousand Royal Engineers and Pioneers, and twenty-two thousand American engineers, were employed in the battle.

The assembly and passage over the river of troops and vehicles was controlled through a carefully planned organization known as the 'Bank Control Group'.

The Order of Battle and timings for the various assaults were as follows: 30 Corps: 51 Division 2100 hours 23 March; 12 Corps: 1 Commando Brigade 2200 hours 23 March and 15 Division 0200 hours 24 March; XVI United States Corps: 30 Division 0200 hours and 79 Division 0300 hours 24 March; XVIII United States Airborne Corps initially to drop at 1000 hours 24 March.

PRELIMINARY AIR OPERATIONS

Although not directly related at the time to the operation of crossing the Rhine, the interdiction programme carried out by Bomber Command and Eighth United States Air Force, in order to isolate the Ruhr, was of direct assistance to our operation. The battlefield interdiction programme began on 10 March, and bombing attacks were carried out to isolate an area astride the Ruhr west of the general line Bonn-Siegen-Soest-Hamm-Munster-Rheine-Lingen-Zwolle.

During the three days prior to the operation, sustained bombing attacks were carried out with the object of reducing the enemy's capacity to fight, hindering his defensive preparations, and disrupting his communications. In the preliminary operations heavy bombers of the Royal Air Force flew over five thousand sorties and dropped nearly twenty-five thousand tons of bombs. The bombardment divisions of the Eighth and Ninth United States Air Forces flew over eleven thousand sorties and delivered twenty-four thousand five hundred tons of bombs.

The pre-arranged programme of air operations in support of the assault crossings included the establishment and maintenance of air superiority over the assault areas and dropping zones of the airborne troops; the neutralization of flak; the provision of fighter protection for the airborne forces; the provision of close support to the assault and airborne troops; and the prevention of enemy movement into and within the battle area.

THE BATTLE OF THE RHINE: THE ESTABLISHMENT OF THE BRIDGEHEAD

At 1530 on 23 March I gave orders to launch the operation, as the weather was good.

As the artillery programme reached its climax the assault waves of four battalions of 51 Division entered the river in their amphibious craft at 2100 hours 23 March. Seven minutes later a report was received that the first wave had arrived on the far bank. All crossings were successful; in the vicinity of the crossing sites the enemy was thinly disposed on the ground and his artillery

had been neutralized by the counter battery bombardment. Good progress was made during the night and elements of the division rapidly approached the outskirts of Rees.

At 2200 hours 1 Commando Brigade began to cross the river about two miles west of Wesel and half-an-hour later was formed up just outside the town. Here they waited for fifteen minutes while two hundred Lancasters of Bomber Command dropped one thousand tons of bombs on the enemy defences, at a distance of only fifteen hundred yards from our leading troops.

The brigade advanced immediately the bombing ceased and, by 0300 hours, was entering the town. Fierce fighting took place, but the systematic elimination of the German garrison of Wesel went forward.

At 0200 hours the four leading battalions of 15 Division were water-borne, and made successful crossings in face of light opposition.

In the Ninth American Army sector, 30 Division on the left crossed north of the Ossenburg at 0200 hours with three regiments abreast, and an hour later 79 Division on the right crossed with two regiments up. The assaults were successful and casualties were light.

Our assault crossings had achieved success, and follow-up formations were soon beginning to pour across the river as the various ferries came into operation. The initial German reaction had been light, although the enemy achieved some measure of recovery on the left sector of the American landings and on the left sector of the British assault.

While the ground troops pushed on in the early hours of 24 March the airborne forces were forming up. 17 United States Airborne Division took off from bases in France, while 6 Airborne Division was lifted from England. Escorted by aircraft of Fighter Command and of the British and American Tactical Air Forces, the two mighty air fleets converged near Brussels and made for the Rhine. Over the bridgehead area an air umbrella was maintained by nine hundred fighters, while deeper into Germany fighter formations kept enemy aircraft away from the battle zone. A great weight of artillery fire from the west bank of the Rhine prepared the way for the airborne drop, and a few minutes before 1000 hours the ground troops saw the aircraft of the first parachute serial arrive. For the next three hours relays of aircraft came in to the dropping and landing zone areas in an immensely thrilling and inspiring demonstration of Allied air power; over seventeen hundred aircraft and thirteen hundred gliders were employed to deliver some fourteen thousand troops in the battle area. Our losses were comparatively light for an operation of this magnitude; under four per cent of the gliders were destroyed while the total

losses in transport aircraft were fifty-five. Immediately following the glider landings, a re-supply mission was flown in very low by 250 Liberators of Eighth United States Air Force. The latter were met by heavy flak and fourteen were shot down, but eighty-five per cent of their supplies were accurately dropped.

On the ground the airborne forces met with varying resistance. In some areas opposition was negligible, but elsewhere troops came down on top of enemy positions and gun areas. 6 Airborne Division seized Hamminkeln and the bridges over the River Issel, and 17 Airborne Division took Diersfordt and the high wooded ground to the east and secured further crossings over the Issel. The Airborne Corps took 3,500 prisoners during the day and cleared all its objectives according to plan.

The arrival of the airborne divisions threw the enemy into confusion and accelerated the progress of the assault divisions. In the American sector Dinslaken was captured and the assault corps reached the general line of the Dinslaken-Wesel road. On the left, elements crossed the Lippe Canal near Lipperdorf about a mile short of Wesel.

1 Commando Brigade made contact with 17 Airborne Division in the Wesel area, having cleared the major part of the town. 15 Division captured Mehr and Haffen and established firm contact with 6 Airborne Division, but farther north progress was not so rapid, as there was fierce fighting round the outskirts of Rees during the day. Bridging and ferrying operations proceeded apace along the length of the river, except in the Rees area, where enemy parachute troops dominated the bridging sites. Alternatives had to be found for the bridges and ferries in order to avoid the heavy and accurate mortar and artillery fire directed on the crossings.

By nightfall Ninth American Army had the whole of 30 and 79 Divisions across the river and elements of two other infantry divisions were on their way. The Army had captured nearly 1,900 prisoners and was holding a bridgehead 4,000 to 6,000 yards in depth. In the Second Army sector 15 Division had secured a number of villages and repulsed several sharp counter attacks; 51 Division had captured Esserden and Speldrop and its leading elements were in the outskirts of Bienen: where a brigade of 3 Canadian Division, under its command, was operating. The British divisions had been supported by regiments of DD tanks, whose appearance on the far bank had greatly disconcerted the enemy, their timely arrival in 15 Division area helping materially in dealing with the enemy counter attacks.

The weather had been most favourable for air operations and all the resources of the Allied Air Forces were thrown into the battle; even air formations based in the Mediterranean area carried out missions associated with the battle.

THE BATTLE OF THE RHINE:
THE EXPANSION OF THE BRIDGEHEAD

During the night 24/25 March our positions were further strengthened and a heavy counter attack against the airborne troops north of Wesel was dealt with. Steady progress was maintained during 25 March. XVI American Corps completed the clearance of Dinslaken and its two assault divisions joined hands on the left. A firm junction had been effected with 1 Commando Brigade south of Wesel. In Wesel itself street fighting continued; the Commandos had by now taken 700 prisoners and were joined by units of 17 Airborne Division.

On the front of 12 Corps the advance of 15 Division continued and Bislich was captured. The division was reinforced by a brigade of 52 Division, while 53 Division began crossing the river over which a Class 40 bridge was now working. In 30 Corps sector, 43 Division crossed into the bridgehead and took station on the left. Meanwhile, except for one small pocket, Rees was cleared by 51 Division.

On the following day XVI American Corps made an advance of over six miles and captured Bruckhausen. The airborne divisions advanced steadily and on their left 52 Division captured Ringenberg. The bridgeheads of 15 and 51 Divisions were securely linked, and farther left 43 Division with a brigade of 3 Canadian Division seized Millingen and Hueth. Early on 27 March, 79 American Division attacked to the south, captured Holten and reached the Dortmund-Ems Canal. In the centre of the American sector 35 Division came into the line and attacked to the east, while on the left 30 Division was meeting heavy opposition as it approached Gahlen. North of the Lippe River the airborne divisions made considerable progress, and enemy resistance on their front was progressively weakening; to add weight to their thrust an armoured brigade passed through the airborne sector at midnight on 27 March.

12 and 30 Corps made progress, although on the left of Second Army's sector the four enemy parachute divisions were still fighting with all their usual tenacity and skill. 12 Corps troops pushed on to Raesfeld and Bocholt, while 30 Corps troops attacked north along the Rees-Isselburg road and were now meeting little opposition except from mines and artillery fire. 43 Division advanced in conformity, and on its left 3 Canadian Division took over the left sector of the Corps bridgehead. Except in the areas held by the German parachute troops, enemy opposition had now very largely disintegrated. On 28 March the Americans were in Gladbach and Gahlen while 6 Guards Armoured Brigade, carrying personnel of 17 American Airborne Division on their tanks, reached Dorsten

and Haltern; 6 Airborne Division captured Erle and Lembeck. In the centre, Rhede was captured and an attack put in on Bocholt, while leading troops of 30 Corps reached the general line Haldern-Isselburg-Anholt after some stiff fighting and, on the extreme left, the Canadians were closing in on Emmerich and the high ground at Hoch Elten. At this stage 2 Canadian Corps became operational and took over the left sector.

8 Corps, which had been in reserve, was now activated and, with 11 Armoured Division, came up on the right of Second Army.

Conditions were now favourable for us to thrust out from our bridgehead.

REFLECTIONS ON THE BATTLE OF THE RHINE

We had forced the River Rhine and were in possession of a springboard on the east bank from which to launch major operations into Germany.

Very great credit is due to the Armies for the speed with which this great undertaking was mounted and delivered, and to the Allied airborne and ground troops for the impetus and dash they displayed in the operation.

During March the enemy's losses in prisoners alone had so far averaged some 10,000 a day, and, with no fresh formations in reserve, it was clear that if he decided to continue the struggle, he had no option but to withdraw the remnants of his forces as best he might, with the hope of forming an improvised front farther to the east. Meanwhile the mighty Russian Army was pressing on from the east: Hitler's Germany was faced with disaster

CHAPTER EIGHTEEN

The Advance to the Elbe

THE DEVELOPMENT OF OPERATIONS EAST OF THE RHINE

I MADE plans for the advance of 21 Army Group together with Ninth United States Army to the Elbe, with the object of establishing the United States forces on the river from Magdeburg to Wittenberge and Second Army from Wittenberge to Hamburg.

In the course of its advance Ninth Army would make contact with the forces of First United States Army, which were pushing north through Marburg from their Remagen bridgehead, and by this means the Ruhr would be encircled and its garrison cut off from the German forces in the east. It was intended to effect this junction in the area of Paderborn, but, if for any reason First Army were held up, I instructed General Simpson to push ahead to the Elbe, making his own arrangements for the security of his right flank. One Corps of the Army was to be detailed to hold the flank along the north of the Ruhr as far east as Paderborn, so that our lines of communication should be safeguarded, and the enemy forces which had retired into the built-up area south of the Lippe Canal would be contained, until we could conveniently dispose of them. To support its advance, Ninth Army was given, after 31 March, sole use of the Wesel bridge, which had previously been shared with Second Army.

Second Army's primary objective was the line of the Elbe from Wittenberge northwards to Hamburg, the left flank of the advance resting on the line Hengelo-Lingen-Bremen-Hamburg. There was a prospect that 30 Corps, operating on the left flank of the Army, might be delayed from breaking out of the bridgehead because of the continued opposition from the parachute divisions north of Rees. In this event, I intended to transfer 30 Corps to command of First Canadian Army, so that Second Army could concentrate all its attention on the task of driving to the Elbe. This regrouping did not, in the event, prove necessary.

Canadian Army was to open up a supply route through Arnhem, and to advance northwards to clear north-east Holland, the coastal belt to the north of Second Army's left boundary,

and western Holland. It appeared that these operations would probably have to be carried out in the order in which I have given them.

When Second and Ninth Armies reached the Elbe, I anticipated that a temporary halt might be necessary in order that Ninth Army might assist in clearing the Ruhr, while Second Army might have to co-operate with the Canadians in reducing the enemy isolated west of the Elbe estuary. In order to ensure maximum support from the Air Forces, the Armies were instructed to pay special attention to the acquisition of airfields, particularly those in the Rheine and Munster areas.

My plan of operations was similar in principle to those carried out by 21 Army Group in north-west France and Belgium during the preceding autumn. Just as in 1944 Second Army drove rapidly across the rear areas of the Pas de Calais cutting the enemy's east-west communications, while Canadian Army mopped up the enemy garrisons along the Channel coast, so in 1945 Second Army was ordered to strike straight for the Elbe across the east-west routes and to come in on Bremen and Hamburg with right hooks from the east, while Canadian Army cleaned up the coastal sectors.

Subsequently, however, the plan outlined above had to be modified. As a result of the general enemy situation, and particularly in view of the rapid American success following the seizure of the Remagen bridge, the Supreme Commander decided that the main Allied thrust east of the Rhine should be directed from the Kassel area through Erfurt towards Leipzig. By this means a junction was to be effected with the advancing Russian forces on or near the Elbe, and the remaining German forces cut in two. Subsequently, the formations of Twelfth Army Group were to be switched north or south, as the situation might dictate. General Eisenhower's orders provided that this thrust into Central Germany was to be initiated as soon as the encirclement of the Ruhr had been completed and the forces trapped therein reduced to an extent which rendered them no longer a menace to the security of our communications.

As a result of this plan, Ninth United States Army was reverted to command Twelfth Army Group on 4 April and formed the left wing element in the American offensive which began on that day.

The aim of 21 Army Group remained to reach the line of the Elbe in our sector, and to reduce the ports of Bremen and Hamburg. Now that the Allies would not be so relatively strong in the northern sector, it was to be anticipated that these tasks would take longer than I had previously hoped, and Second Army would require to watch for the security of its southern flank. I decided to establish

an intermediate phase in our advance to the Elbe on the line of the Weser, Aller and Leine rivers. While Second Army advanced to this line, Canadian Army was to clear north-east Holland and the Emden-Wilhelmshaven peninsula.

NINTH UNITED STATES ARMY OPERATIONS
TO 4 APRIL

The operations of Ninth United States Army after the establishment of its Rhine bridgehead were characterized by great dash and speed. Enemy resistance was scattered and ineffective, and by 3 April, led by armoured divisions, XIII Corps on the left had reached the line of the Weser north-east of Herford, while XIX Corps, having established contact with First United States Army near Lippstadt and thus completed the encirclement of the Ruhr, pushed on to the east. On the right flank, XVI Corps forced its way southwards into the built up area of the Ruhr valley and subsequently operated with First United States Army in the reduction of the enemy trapped in the Ruhr pocket.

THE ADVANCE OF SECOND ARMY TO THE ELBE

The main Second Army advances from the Rhine bridgehead were conducted by 8 Corps on the right, directed on Osnabruck, Celle and Uelzen, by 12 Corps in the centre, on Rheine, Nienburg and Luneburg, and by 30 Corps on the left, on Enschede, Bremen and Hamburg. It had also been intended, prior to the change in the overall Allied plan, to employ XVIII United States Airborne Corps on the right of 8 Corps, to capture Munster. This Corps, however, ceased to be operational on 30 March, and it was left to XIII Corps, under Ninth Army, to reduce Munster on 3 April. Of the British elements in XVIII Airborne Corps, 6 Airborne Division had passed to 8 Corps on 29 March, but 6 Guards Armoured Brigade remained attached to Ninth Army until 4 April, when it also reverted to 8 Corps.

The resistance to the advances of Second Army was lightest on the right flank in front of 8 Corps. Elsewhere it varied; in some areas the enemy succeeding in delaying our progress with hastily formed battle groups. Despite the general disintegration of his forces, however, the German skill in using demolitions to impede the pursuit was as marked as ever, and heavy burdens were imposed on our engineers as a consequence. The area between the Rhine and the Elbe was intersected by innumerable waterways, including such major obstacles as the Ems and Weser rivers and the Dortmund-Ems and the Ems-Weser canals; over five hundred bridges had to be constructed in the course of the advance.

8 Corps made rapid strides to reach the Dortmund-Ems canal, which was crossed without undue difficulty. Osnabruck was cleared, and by 5 April Minden and Stolzenau, on the Weser, were captured by 6 Airborne Division and 11 Armoured Division respectively, and bridgeheads over the river were seized in both areas. The Corps advanced north from the Weser on 7 April and within three days Celle had been captured by 15 Division and bridgeheads established over the Aller river. As the advance continued resistance stiffened in the area of Uelzen, where there was four days' hard fighting before the town was reduced on 18 April. At the same time Luneberg fell to 11 Armoured Division, which reached the Elbe opposite Lauenburg on the next day. By 24 April the west bank of the river had been cleared throughout the Corps sector.

12 Corps also had little difficulty in the early stages of its advance from the Rhine bridgehead, but resistance became firmer on the line of the Dortmund-Ems Canal. Bitter fighting took place for the airfields in the Rheine area, where troops from nearby Officer Cadet Schools held up the advance for some days. 7 Armoured Division cleared the area by 6 April, however, and then pushed eastwards to cross the Weser against light opposition. There was further resistance east of the river, where SS elements with 88 millimetre guns on railway mountings temporarily checked 53 Division at Rethem. Soltau was captured on 18 April and, on the next day, 7 Armoured Division cut the Bremen-Hamburg autobahn after a wide sweep to the north. The outskirts of Harburg, on the south bank of the Elbe opposite Hamburg, were entered on 23 April and 12 Corps closed to the river.

The 30 Corps advance met obstinate resistance by SS and parachute elements along the Dortmund-Ems Canal line near Lingen. It was not until 6 April that a further advance could be made following the clearance of the town by 3 Division. Opposition was encountered in some areas east of the Ems and stiffened considerably as the Corps closed in on Bremen, where the defence was considerably assisted by demolitions and widespread inundations. In these circumstances, the plan for the capture of Bremen was to deliver a two-fold assault on the city, striking from front and rear simultaneously. A frontal holding attack against that part of the city west of the Weser was delivered by 3 Division while 43 and 52 Divisions, having crossed the Weser upstream, delivered a right hook from the east. By 19 April our forces were two miles south of the city on the near bank and ten miles south-east on the far bank, but it was not until the night of 24 April that the intervening ground had been secured. Once the attackers were within the city itself, however, resistance crumbled, and the chief impediment to progress lay in the debris caused by our own bombing. By 26 April the last pockets of resistance had been mopped up. With Bremen

Zee; the Apeldoorn-Amersfoort road was cut and the coast of the Zuider Zee reached on 18 April. Apeldoorn itself had been taken by 1 Canadian Division on the preceding day after a sharp battle with German paratroops.

Following these successes, 5 Canadian Armoured Division moved over to join 2 Canadian Corps in the task of reducing the enemy along the northern coastline, in which operations Polish Armoured Division had now been included. By 20 April, north-east Holland had been cleared except for a small area on the western shore of the Ems estuary. While 5 Canadian Armoured Division took over the country west of the Dutch-German frontier, 2 Canadian Corps was able to concentrate the remainder of its divisions east of the Ems to deal with the enemy between the river and the mouth of the Weser. As Bremen fell, 2 Canadian Corps was directed to seize Wilhelmshaven and Emden and to complete the reduction of the peninsula between the two rivers.

RELIEF TO WESTERN HOLLAND

On the conclusion of the Arnhem operation and the isolation of the enemy by our thrust to the Zuider Zee, 1 Canadian Corps closed to the line of the Rivers Grebbe and Eem. I then instructed First Canadian Army to halt its offensive operations against 'Fortress Holland' and the position remained the same until the German garrison capitulated. Little use could have been served by a further advance at this stage. Although the enemy was completely cut off from any hope of relief or reinforcement, he was strongly entrenched behind a formidable barrier of artificial floods, and offensive operations would have required considerable resources, which were not at this stage available in this sector. The reduction of western Holland might also have caused even greater suffering to the civilian population, already reduced to desperate straits by lack of food and the ruthless inundation of their land.

A means of alleviating this civilian distress was, however, found when the German Civil Commissioner, Seyss-Inquart, approached the Allies with the offer of a truce which would permit the introduction of relief supplies. We readily agreed to take advantage of this opportunity and the movement of food stocks, medical supplies and other urgently required commodities was promptly initiated.

AMERICAN OPERATIONS EAST OF THE RHINE

In spite of the increasing enemy forces that the Remagen bridgehead attracted, Twelfth United States Army group expanded

rapidly its territory east of the Rhine and began thrusting east and north-east in a drive which reached the Paderborn area by the end of March. Third American Army, which had eliminated the Saar triangle in conjunction with Sixth United States Army Group, crossed the Rhine astride Mainz in the last week of March and came up on the right of First Army.

By the middle of April First United States Army was within ten miles of Leipzig and General Patton's forces had reached Nuremberg and the Danube valley.

CHAPTER NINETEEN

The Drive to the Baltic

IT must be remembered that the Allies were not in great strength in the wide 21 Army Group sector east of the Rhine, and in view of this fact our advance to the Elbe had been conducted with creditable speed. It has been seen that, although the general enemy organization had largely disintegrated, there was some stiff fighting in certain areas, particularly on the Dortmund-Ems Canal, and our troops were faced with the usual problem of demolitions and mines.

Having lined up on the Elbe, it became the Supreme Commander's intention that 21 Army Group should advance to the Baltic and thus cut off Schleswig-Holstein and Denmark and proceed to seize the Kiel Canal and the north-west German ports. In order to give us some additional strength for this task, I was allotted XVIII United States Airborne Corps of three divisions.

On 22 April I issued instructions for the development of operations. My object was to capture Lubeck and Hamburg, seal off the Schleswig-Holstein peninsula and clear the area up to the Danish frontier. I envisaged the initial operations being carried out in two phases: first, the establishment of a bridgehead across the Elbe and secondly, a strong thrust northwards to the Baltic. A secure east flank north of the Elbe was to be formed by XVIII United States Airborne Corps on the general line Darchau-Schwerin-Wismar. As the operations of the Airborne Corps developed, 6 British Airborne Division would be added to it to help hold the flank position.

I anticipated that contact would be made very shortly with our Russian Allies and, to avoid misunderstandings, I directed that our troops would halt as and where they met the Russians and would be disposed in accordance with joint military requirements, irrespective of the ultimate occupation zone boundaries.

In outline, the plan of Second Army was for 8 Corps to assault across the Elbe in the area of Lauenburg and to establish a bridgehead on the east bank about 15 miles wide and 8 miles deep. XVIII United States Corps was to establish a bridgehead on the right of 8 Corps sector, as it was estimated that any attempt to pass this Corps over the 8 Corps bridgehead would lead to congestion and delay in the carrying out of its task. Having secured a good bridgehead east of the river, 8 Corps was to develop a strong thrust northwards with all speed to capture Lubeck. Bridges

were to be constructed across the river in the 8 Corps sector by 12 Corps: which would then cross the river and turn west to mask Hamburg, preparatory to an assault on the city.

The Elbe operation demanded very considerable tonnages of bridging, in addition to the normal administrative build-up. From the maintenance aspect, however, the advance to the Elbe had proved easier to support than the pursuit after Normandy, because of the well-developed bases in Belgium and the roadhead previously established near the Rhine.

Transport continued to be centralized, which gave great flexibility of allocation. To the extra 10,000 tons road lift which Second Army was allotted in March, a further 2,000 tons lift was added in April; at the end of the campaign Second Army had a transport lift from General Headquarters sources alone of 23,000 tons, which is the equivalent of seventy-six General Transport Companies.

Delivery of stores by air freight continued, but owing to the degree of centralization involved, the system was not flexible, and changes of priority could not be speedily made. Events showed that in a fast moving campaign completely centralized control of transport aircraft leads eventually to lack of economy and prevents improvisation, which is so essential under such conditions. I should like to mention here that returning aircraft did magnificent service in repatriating our released prisoners.

On 9 April, Second Army established a roadhead in the Rheine area and shortly afterwards near Sulingen. Forward delivery from Sulingen to the 8 Corps Field Maintenance Centre involved a carry of nearly 90 miles over extremely bad roads; the situation was eased, however, by opening a stretch of railway from Celle to a railhead near Luneburg.

While the administrative build-up was being completed, XVIII United States Corps carried out a remarkably rapid concentration, from points as far distant as the Ruhr and Cologne.

It was eventually found possible to launch the 8 Corps assault in the early hours of 29 April, while XVIII Corps was to make its crossing 24 hours later.

Next to the Rhine, the Elbe is the most important river in Germany. On the front of Second Army it was about 300-400 yards wide, with dykes similar in construction and appearance to those which existed in the Rhine valley. There was a number of ferries in the area, but only one bridge—a railway bridge at Lauenburg—and this had been destroyed by the enemy.

The German Army was now fast approaching disintegration, but it was estimated that there were some eight or nine battalions facing Second Army on the east bank of the Elbe. Almost the

whole of the enemy artillery consisted of flak guns, some of which were mounted on railway trucks.

THE LAST OPERATION

At 0200 hours on 29 April, 15 Division, with 1 Commando Brigade under command, attacked across the Elbe. The leading infantry were conveyed in amphibians, as in the Rhine crossing, and were assisted by the use of DD tanks, all of which reached the far bank without loss. The operation proceeded according to plan and a bridgehead was established during the day; opposition was generally light and over 1,300 prisoners were captured. The main trouble was caused by the shelling of the selected bridging sites, and some activity on the part of the German Air Force. We were now approaching the last group of airfields left to the Luftwaffe in Germany and, in the weather conditions which obtained, it was always possible for small numbers of enemy aircraft to approach under cover of clouds and take fleeting hostile action. The Royal Air Force provided the maximum amount of air cover, which included a number of our new jet-propelled fighters, and shot down thirteen enemy aircraft during the day.

On 30 April 82 United States Airborne Division attacked astride Bleckede in assault boats in the face of very light opposition. The construction of a heavy bridge was put in hand, and a bridgehead was quickly secured.

In the 8 Corps sector some regrouping took place to facilitate the development of operations. A class 40 bridge was completed at Artlenburg and 6 Airborne Division began to cross the river, followed by 11 Armoured Division. Reconnaissance elements of 15 Division were some seven miles east of the river during the day.

On 1 May rapid progress was made by both the Allied Corps. On the right, 82 Airborne Division moved south-east along the bank of the river and 6 Airborne Division, which came under command of XVIII Corps at 1500 hours, advanced north for a distance of about eight miles. A class 40 bridge was constructed at Dachau and 7 United States Armoured Division began to cross.

The advance from the 8 Corps bridgehead was led by 5 Division on the right and 11 Armoured Division on the left, directed on Lubeck. 11 Armoured Division advanced rapidly for fifteen miles and reached Wendorf, about half way to Lubeck, with 5 Division making good progress on its right. Meanwhile, 15 Division, following the north bank of the river, had reached Geestacht, about sixteen miles short of Hamburg.

On 2 May 82 Airborne Division advanced farther east and cleared a large area which included Domnitz. 7 United States Armoured Division made a swift advance of twenty miles and

captured Ludwigslust while, farther north, 8 Division captured Schwerin. 6 Airborne Division on the left made a forty miles advance against no opposition and occupied Wismar on the Baltic coast. A few hours after its arrival, Russian tanks appeared and made contact with our troops.

11 Armoured Division entered Lubeck without opposition after a drive of thirty miles, while 5 Division on the right continued along the west side of the Ratzeburger See.

In the meantime, the leading formations of 12 Corps had passed through the 8 Corps bridgehead with the task of capturing Hamburg, but this operation was no longer necessary as the German garrison commander came out to surrender the city unconditionally and our troops entered without opposition on 3 May.

The countryside north of the Elbe was now packed with a mass of German soldiery and refugees, fleeing from the Allied advance and from the Russians. It could now be said that the enemy had decided to abandon the fight and, apart from small groups of fanatics, nothing more than token resistance was to be expected from the German armed forces south of the Kiel Canal. I ordered a pause in our advance to be made on a line which would cover Lubeck and Hamburg, as German plenipotentiaries were on their way to surrender.

CHAPTER TWENTY

The Surrender

BEHIND the scenes those Germans who understood military arguments had for some time been trying to find a way to surrender. Once we had crossed the Rhine further resistance was obviously futile. But Hitler was deaf to military arguments. Moreover, those who were putting out feelers behind his back were anxious not so much to end the war as to buy us off in the west so that they could continue their losing battles in the east. This was the last round in their fight to avoid the two-front war the Germans had brought upon themselves.

The first approaches I heard of were made in March to the British Embassy in Stockholm, where the notion of a unilateral peace was rejected out of hand. Shortly afterwards we began to receive those hints from western Holland which I have already mentioned. Two meetings were held at the end of April with Russian, American and British representatives on our side to discuss feeding the Dutch. Beyond that, however, Seyss-Inquart would not or could not take a military decision while Blaskowitz, the military commander, refused to consider capitulation so long as any force continued to resist within Germany itself. We were able to start feeding the Dutch, but western Holland remained in German possession for another week.

Meanwhile, once again through Stockholm, had come the news that Field Marshal von Busch was willing to come to terms with the British. General Lindemann in Denmark was also believed to be willing to capitulate. Again, however, it was not a straightforward matter. Von Busch was hoping to rescue his forces from the Soviet armies advancing rapidly towards their rear from the east. He let it be known that he would surrender, but not until we had reached the Baltic, where he would be cut off from the Russians and also, interestingly enough, from the possibility of SS reinforcements which might insist on the continuation of hostilities. In fact, the Germans fell into two categories: those like Hitler himself, who refused to consider giving up fighting at all, and those like Himmler and von Busch who hoped to do a deal which would divide the Allies.

Following the Second Army's assault across the Elbe on 29 April, Wolz, the German Commander in Hamburg, made contact with Major-General Lyne commanding 7 Armoured Division. On 2 May he had agreed to the local surrender of the

city when it became known that his own superior commander, General Blumentritt, wished to surrender to Second Army. It was agreed that Blumentritt's delegation should come to General Dempsey's Tactical Headquarters next morning.

By now the situation was quite beyond German control. Hitler was dead (though we did not know it at the time) and Grand-Admiral Doenitz was trying in Schleswig-Holstein to exercise command in his stead. He was prepared to end the war, but not to surrender to the Russians. He therefore ordered the armies retreating before the Russians to surrender to the Anglo-Americans. In the narrowing belt between the eastern and western fronts the confusion was most remarkable.

German willingness to surrender developed rapidly as the situation worsened, and instead of Blumentritt's delegation arriving at General Dempsey's Headquarters there appeared a much stronger team led by General-Admiral von Friedeberg, who was Doenitz's emissary, accompanied by General Kinzel, Busch's Chief of Staff. The delegation was empowered to discuss the surrender of the entire enemy forces in the north. Accordingly, they were sent on to my Tactical Headquarters on Luneburg Heath. Wolz, who had accompanied them, stayed behind to sign the surrender of Hamburg to Second Army.

When von Friedeberg arrived he told me that the German High Command wished to surrender to me the forces in the northern sectors, including those withdrawing through Mecklenberg before the Russian advance. He wished to save his soldiers from the Russians and asked my permission that civilian refugees should be allowed to pass through our lines into Schleswig-Holstein. I refused to accept the surrender of the German forces opposing the Russians, and explained that their capitulation should be negotiated with our Russian Allies. As far as the enemy on my own front was concerned I made it clear that I would only discuss the unconditional surrender of all forces—land, sea and air—still resisting in Holland, the Frisian Islands, Heligoland, Schleswig-Holstein, Denmark, and those parts of Germany west of the Elbe still in German possession. Unless I received their unconditional surrender I would order fighting to recommence: gladly. I then showed von Friedeberg a map of the current operational situation of which he was apparently not properly aware, and this helped to convince him of the hopelessness of the German position.

The delegation then explained that they had no power to agree to my demands; they were now prepared, however, to recommend their acceptance to Field Marshal Keitel. Two members of the delegation left immediately by car to return to Keitel's Headquarters, while the others remained at my Tactical Headquarters on Luneburg Heath.

At 1800 hours on 4 May, von Friedeberg returned to my Headquarters, having obtained further instructions from Keitel and Doenitz. First I saw him privately in my office caravan where I told him that all I was interested to hear was whether he had brought back an answer "Yes" or "No" to my demand for unconditional surrender. On learning that the answer was in the affirmative, we adjourned to a tent nearby which had been prepared for the signing of the Instrument of Surrender.

The Instrument of Surrender was signed in my presence at 1820 hours on 4 May, and I received it under the powers conferred upon me for the purpose by the Supreme Commander. This document and the 'Cease Fire' order are reproduced.

The capitulation was to become effective at 0800 hours on 5 May. By its terms, the German Command agreed that all the forces under their control in Holland, north-west Germany (including the Frisian Islands, Heligoland and all other islands), Schleswig-Holstein and Denmark would lay down their arms and surrender unconditionally. The German Command would then carry out at once, and without argument or comment, any further orders which might be issued by the Allied Powers on any subject; and the decision of these Powers would be final were any question of interpretation of the terms to arise. It was understood that the Instrument signed at my Headquarters was to be superseded by any General Instrument of Surrender subsequently to be imposed relating to Germany and the German armed forces as a whole.

We had not long to wait for this final act, for by now the disintegration of the German ability to resist further had spread throughout all sectors of the fronts. The enemy had abandoned the struggle in Italy on 2 May, while the First and Nineteenth Armies, facing the Allied Sixth Army Group in Southern Germany and Austria, accepted the terms of capitulation on 5 May, 'cease fire' being ordered on the following day.

Von Friedeberg reported to General Eisenhower's Headquarters at Reims on 5 May. Even at this stage an attempt was made to obtain concessions, and to gain time in which to evacuate the maximum number of German troops before the Russian lines in order to surrender them to the Western Allies. The Supreme Commander, however, took firm measures to check this procrastination, and the Instrument of Surrender was signed by Colonel General Jodl, who had been taken to Reims on 6 May, at 0241 hours the next morning. It became effective at midnight 8/9 May. On 9 May Field Marshal Keitel, for the German High Command, signed the formal ratification of surrender in Berlin.

Instrument of Surrender

of

All German armed forces in HOLLAND, in
northwest Germany including all islands,,
and in DENMARK.

1. The German Command agrees to the surrender of all German armed forces in HOLLAND, in northwest GERMANY including the FRIESIAN ISLANDS and EELIGOLAND and all other islands, in SCHLESWIG-HOLSTEIN, and in DENMARK, to the C.-in-C. 21 Army Group. ~~It is to include all naval ships in these areas.~~ These forces to lay down their arms and to surrender unconditionally.
2. All hostilities on land, on sea, or in the air by German forces in the above areas to cease at 0800 hrs. British Double Summer Time on Saturday 5 May 1945.
3. The German command to carry out at once, and without argument or comment, all further orders that will be issued by the Allied Powers on any subject.
4. Disobedience of orders, or failure to comply with them, will be regarded as a breach of these surrender terms and will be dealt with by the Allied Powers in accordance with the accepted laws and usages of war.
5. This instrument of surrender is independent of, without prejudice to, and will be superseded by any general instrument of surrender imposed by or on behalf of the Allied Powers and applicable to Germany and the German armed forces as a whole.
6. This instrument of surrender is written in English and in German.

The English version is the authentic text.
7. The decision of the Allied Powers will be final if any doubt or dispute arises as to the meaning or interpretation of the surrender terms.

FROM : EXFOR MAIN :	DATE-TOO 04 2050 B
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TO : FOR ACTION : FIRST CDN ARMY : SECOND BRIT ARMY :

L of C : GHQ AA TPS : 79 ARMD DIV :

EXFOR REAR :

FOR INFM : SECOND TAF : EXFOR TAC : 22 LIAISON HQ :

GO 4/1A SECRET . all offensive ops will cease from receipt this signal .
orders will be given to all tps to cease fire 0800 hrs tomorrow saturday
5 may . full terms of local German surrender arranged today for 21 ARMY CP
front follow . emphasise these provisions apply solely to 21 ARMY CP fronts
and are for the moment excl of DUNKIRK . ack

IN CIPHER if liable
to interception

DOP
EMERGENCY

Copy to: All Branches Main HQ 21 Army Group
War Diary (2)

CHAPTER TWENTY-ONE

"21 Army Group" becomes "British Army of the Rhine"

WITH the cessation of hostilities the task of 21 Army Group had been completed.

Formations were successively deployed within the British Zone to establish our Military Government, and set about their occupational duties. While the machinery of the Control Commission for Germany was being set up the Army was called upon to shoulder the responsibilities of government in an area as big as England and with a population of some twenty millions. Order had to be produced from chaos, and life in Germany, with all its attendant problems, restarted.

Meanwhile the status of 21 Army Group changed, and it was reorganized into an occupational force to which was given the title 'The British Army of the Rhine'.

The change in designation took place on 25 August 1945, and on this occasion I issued a special message to all ranks under my command, which is here reproduced.

BRITISH ARMY OF THE RHINE

PERSONAL MESSAGE FROM THE C-IN-C

(To be read out to all Troops)

1. On Saturday, 25 August, 1945, the 21st Army Group will cease to exist and the British forces in north-west Europe will be known as 'The British Army of the Rhine'.
2. I cannot let this moment pass without a reference to the past achievements of 21 Army Group. This Group of Armies fought on the left or northern flank of the Allied Forces that invaded Normandy in June, 1944; these forces liberated France, Belgium, Holland, Luxemburg and Denmark; they invaded Germany, and fought their way to the centre of that country where they joined hands with our Russian allies: and thus ended the German war.

The Army Group completed its active operations by gathering as captives on the northern flank, in the space of a few days,

upwards of two million of the once renowned German Army. The fame of the Army Group will long shine in history and other generations, besides our own will honour its deeds.

3. Officers and men of the Army Group are now scattered throughout the world; many are serving in other theatres; many have returned to civil life.

To all of you, wherever you may be, I send my best wishes and my grateful thanks for your loyal help and co-operation.

4. To those who still serve in Germany I would say that, though our name is changed, we still have the same task. As a result of this war much of Europe has been destroyed, and the whole economic framework of the continent lies in ruins. We have a job to do which will call for all our energy and purpose; we have got to help to rebuild a new Europe out of the ruins of the old.

It is a gigantic task.

But we must face up to it with that same spirit of service to the common cause of freedom which has so strengthened us during the stress and strain of war.

Together we have achieved much in war; let us achieve even more in peace.

B. L. MONTGOMERY.

Field Marshal,

Commander-in-Chief,

British Army of the Rhine.

25 August, 1945.